

# A DECADE OF DESIGNS

Over 60 FULL-PAGE Plans

Number

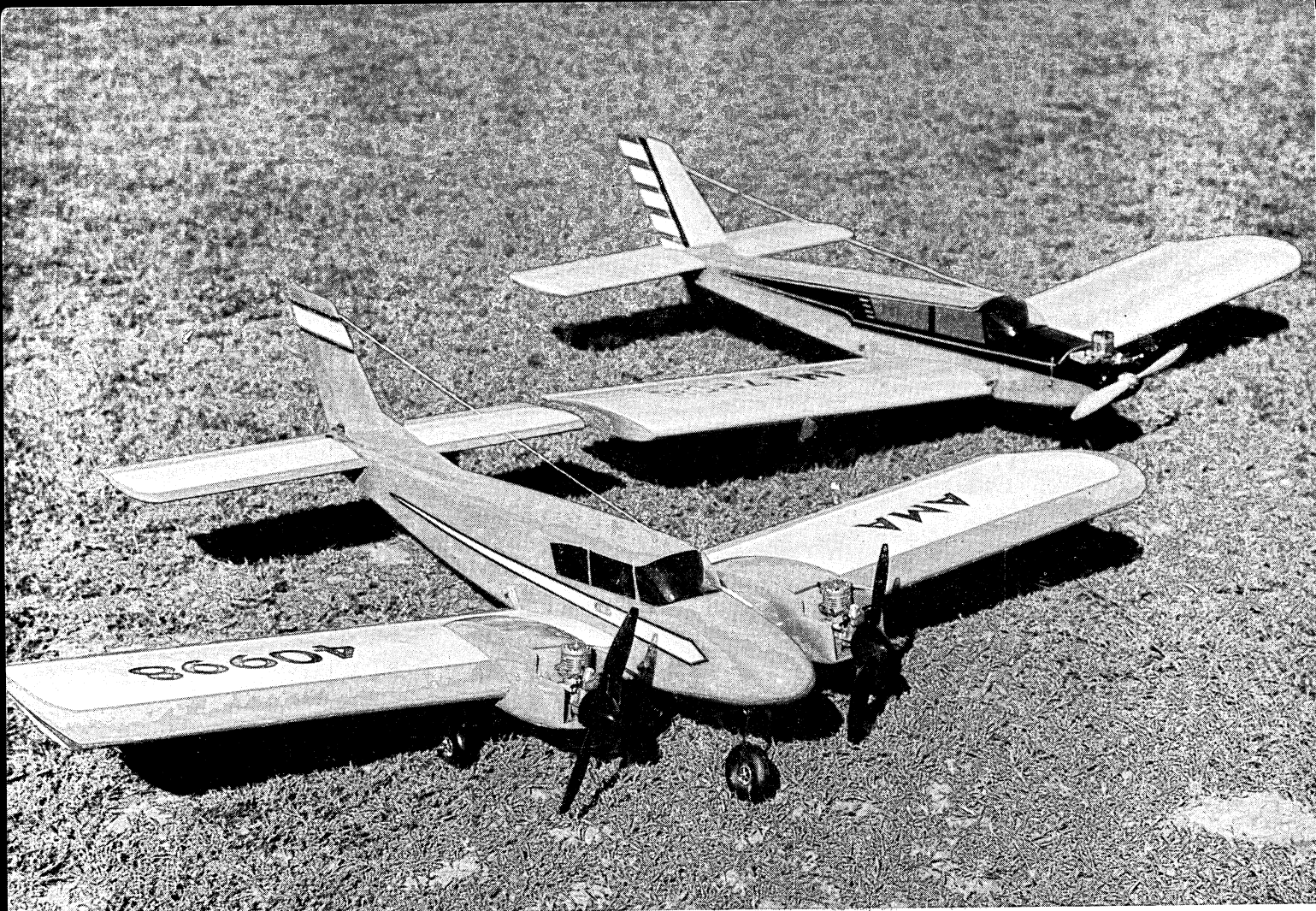
2



FLYING MODELS  
LIBRARY

RADIO CONTROL  
CONTROL LINE  
FREE FLIGHT  
SOARING  
INDOOR





**THE COVER:** To capture the thrill of flying models, nothing beats the excitement at a big meet such as in this view of the Spokane Internationals hosted by the Washington Air National Guard. Top models, top modelers, military precision flying teams, and competition all combine to give the modeler the lift needed to spark his own creative talents. Ektachrome by Don McGovern.

This second edition of **DECADE OF DESIGNS NO. 2** is the result of countless requests from readers of *Flying Models Magazine*, and is a compilation of the best representative designs from FM during the years 1956 to 1966. Ten years covers a wide span and a variety of thinking. Here are flying model designs covering virtually every type of model aircraft that can fly: radio control, control line stunt and combat, free flight gas, rubber, sailplanes, and even several helicopters.

Model aviation changes constantly and any compilation will naturally include concepts and design innovations which have changed with the passage of time. Radio control equipment, as an example, is far more advanced than the days when some of the plans herein were first conceived. Use of modern R/C gear will sometimes necessitate deviations from the plans. Don't be afraid to make them. The information found in this book created the designs of today and we feel they are as modern as tomorrow.

Some of the plans in this volume are now available from Carstens Plan Service as full size drawings, as are most of the plans appearing in our companion volume "Model Plane Building From A to Z". To determine availability of these full size plans at any future date, refer to the ad in the then current issue of *Flying Models Magazine*.

Veteran modelers will have little difficulty using the plans in this book. We would suggest that beginners have several good comparable kits under their belt before attempting scratch building. Kits contain most of the basic needed parts and your local hobby retailer can readily

supply you with the other needed items: wheels, props, covering, radio gear, engines, gas tanks, lettering and trim, dope, and so on.

Many modelers get their kicks from kit bashing, as in this superb twin engined Aztec by Bruce Petersen, built from a VK Cherokee kit. Many of the plans in this book will provide ideas for similar kit customizing for those modelers who want individualized planes. How-to article on above conversion appeared in Feb. 1970 issue of *Flying Models Magazine*.

Your local dealer can also supply balsa and other parts needed for scratch building. The embryo builder should be aware of the variety and quality of the thousands of component parts available to the serious flying modeler. Gas tanks come in a wide variety, of sizes and shapes: round, square, oblong, flat, some with sloping fronts, and others in which the fuel line can be spotted at the whim and desire of the modeler. The modeler can make his own hinges from thread or coverings such as Mono-Kote, or he can buy ready made hinges that are inobtrusive and easy working. Landing gear, including steerable nose gear, are offered in many styles, sizes, and designs. Coverings run the range from low cost tissue to self-adhesive pre-colored vinyls, with matching numerals and trim.

Balsa is still the odds on favorite of most modelers but foam plastic wings, molded ABS plastic floats, and other components are highly acceptable. See your dealer for all these items, as well as the ads in magazines such as *Flying Models*.

Most serious flying modelers quickly learn that flying is more fun when you belong to a club, of which there are hundreds in the United States, Canada, and in other countries. Clubs have access to or know of the best local flying sites, and provide a wealth of mutual help through sharing of problems and knowledge. Local hobby shops can direct you to the location of nearby clubs.

# A DECADE OF DESIGNS

Over 60 FULL-PAGE Plans

Number  
**2**

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## FLYING MODELS



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EDITED BY  
**ROBERT J. BURAGAS**  
FORMERLY EDITOR  
**FLYING MODELS MAGAZINE**

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Sailplanes have soared in popularity, especially with the advent of radio control which can keep a sailplane aloft as long as the modeler holds out. George Uveges shot this photo of sailplane expert Dale Willoughby holding a giant Cirrus glider model. Many gliders have small gas launching engines pod mounted for power assisted takeoffs, turned off when the plane finds a thermal.



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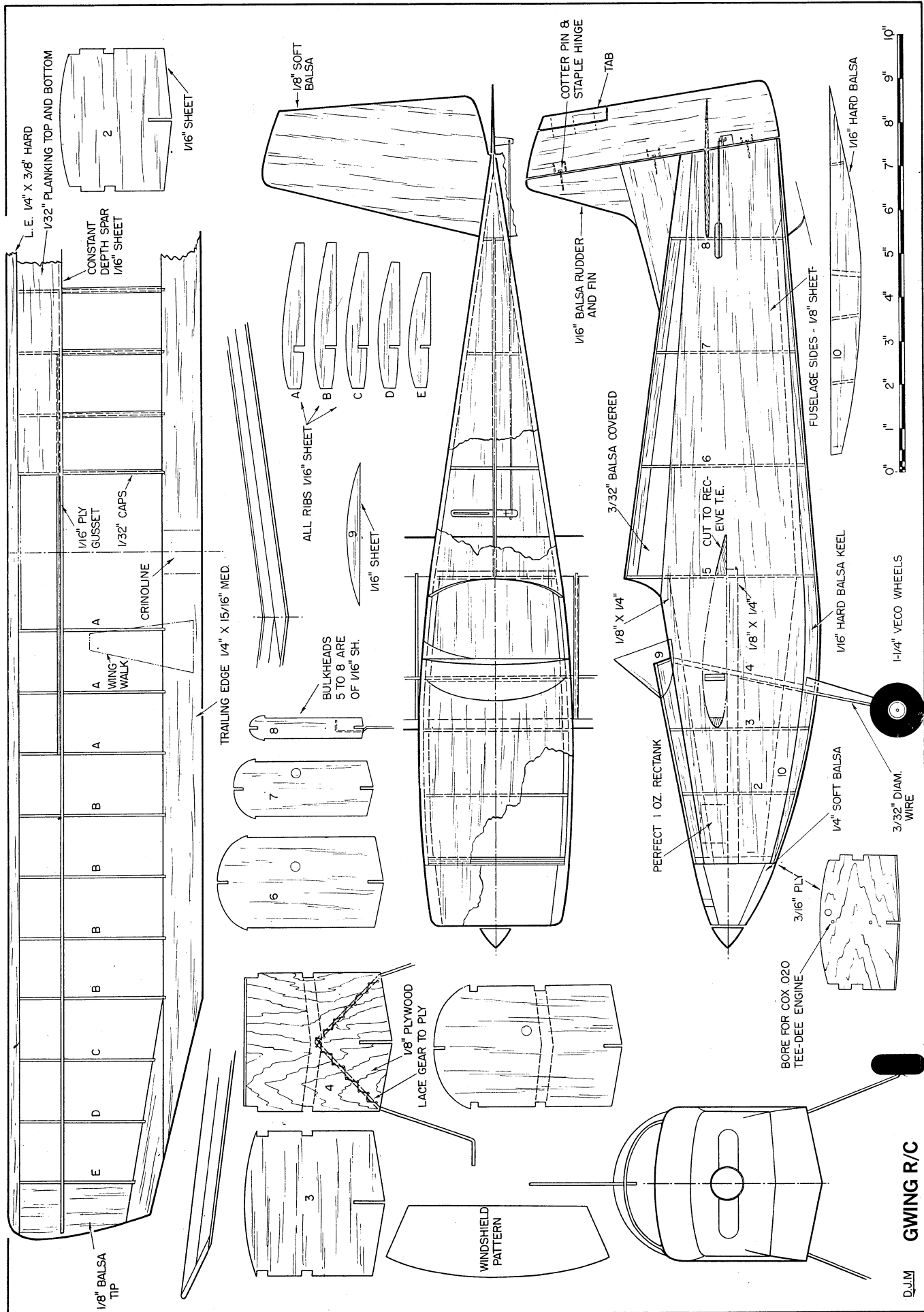
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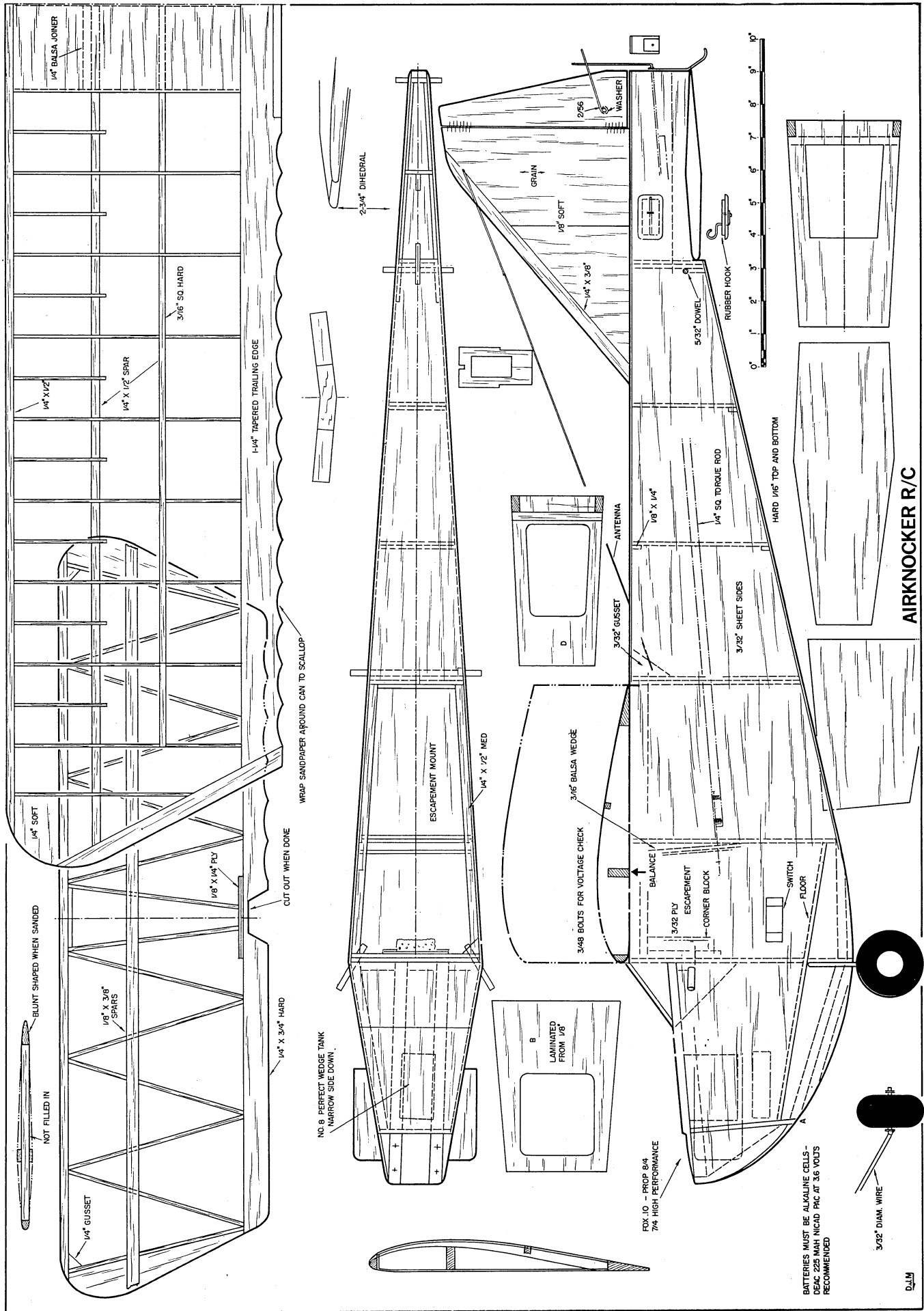






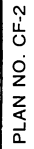


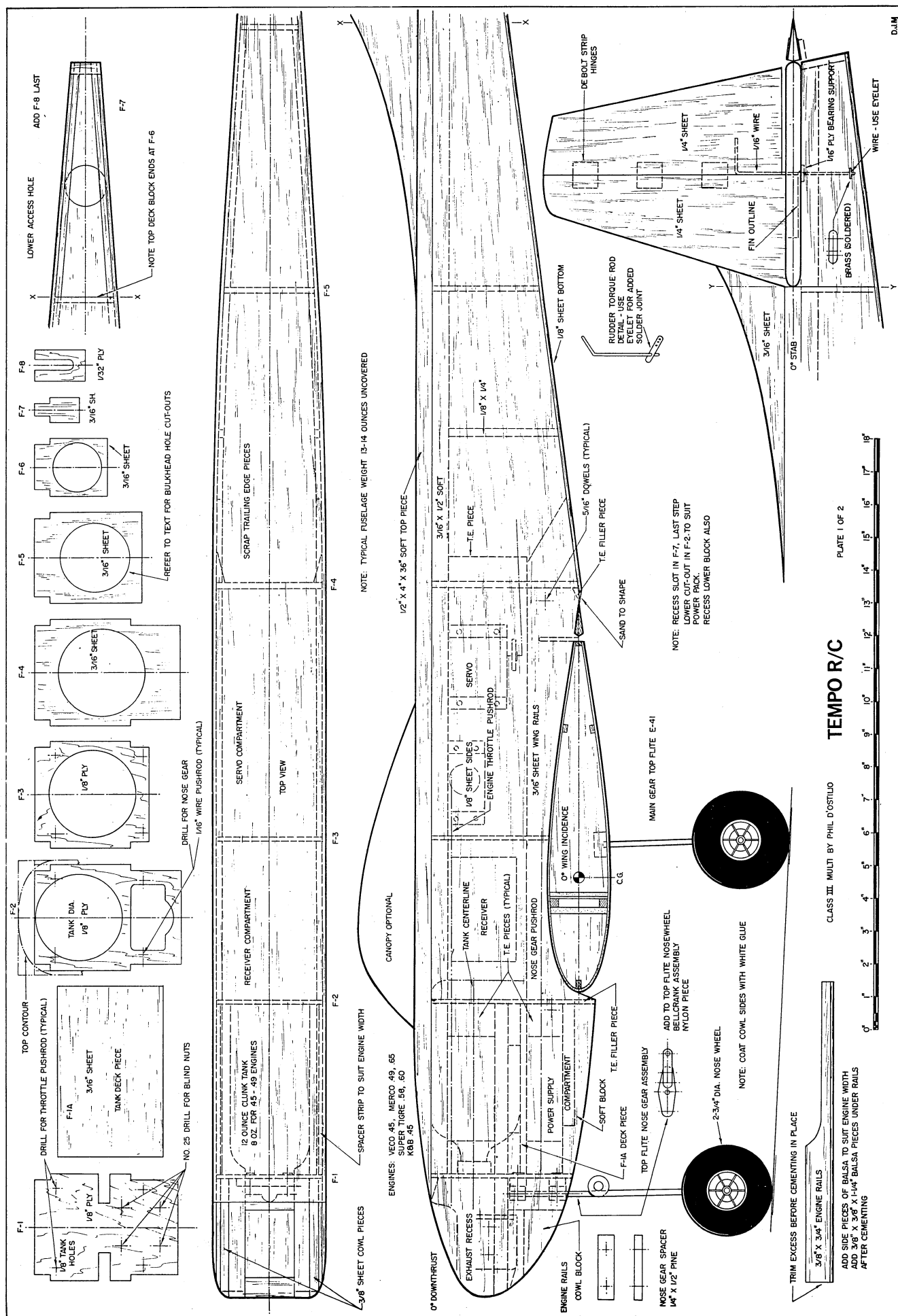








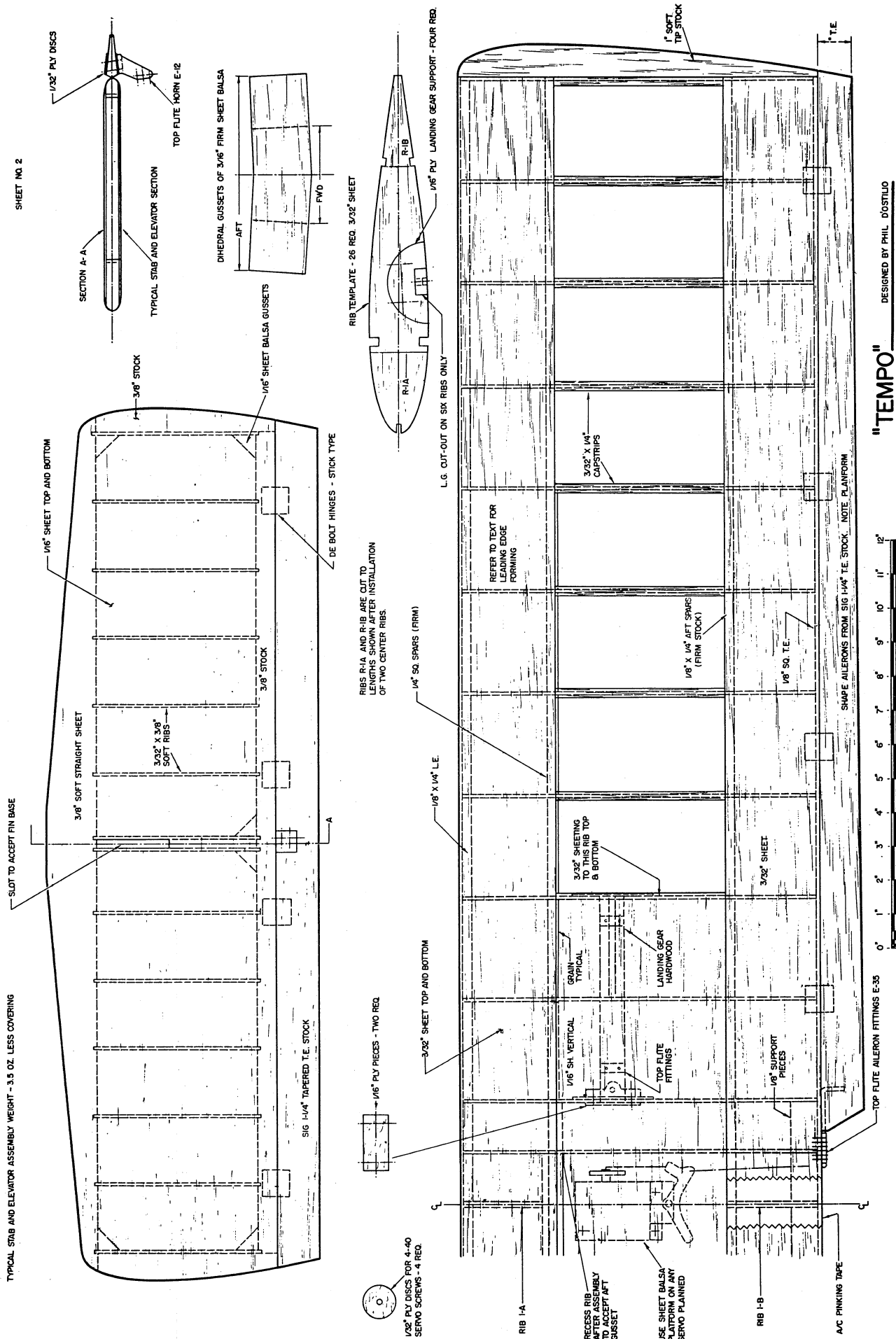


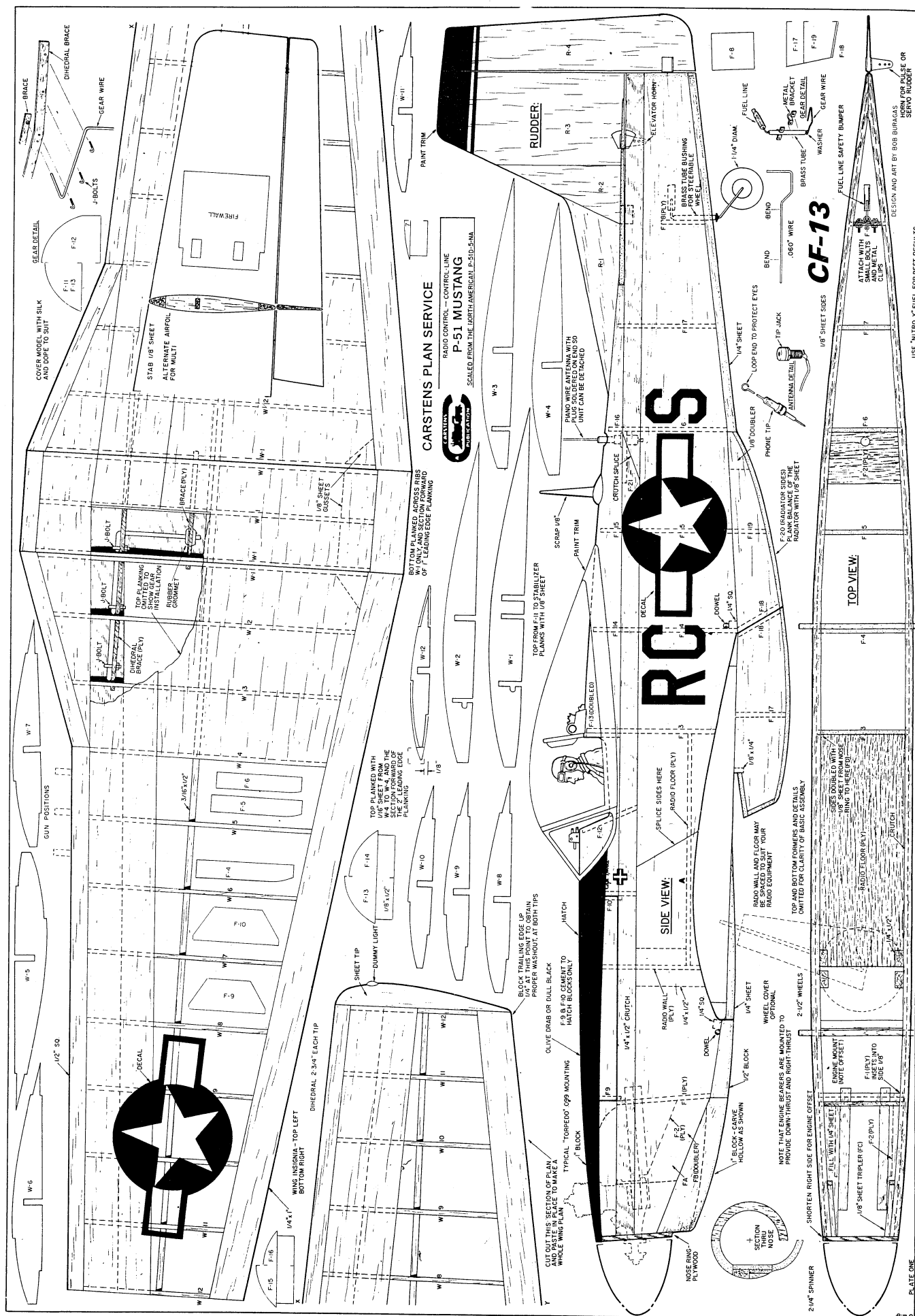




TYPICAL STAB AND ELEVATOR ASSEMBLY WEIGHT - 3.5 OZ. LESS COVERING

SHEET NO. 2



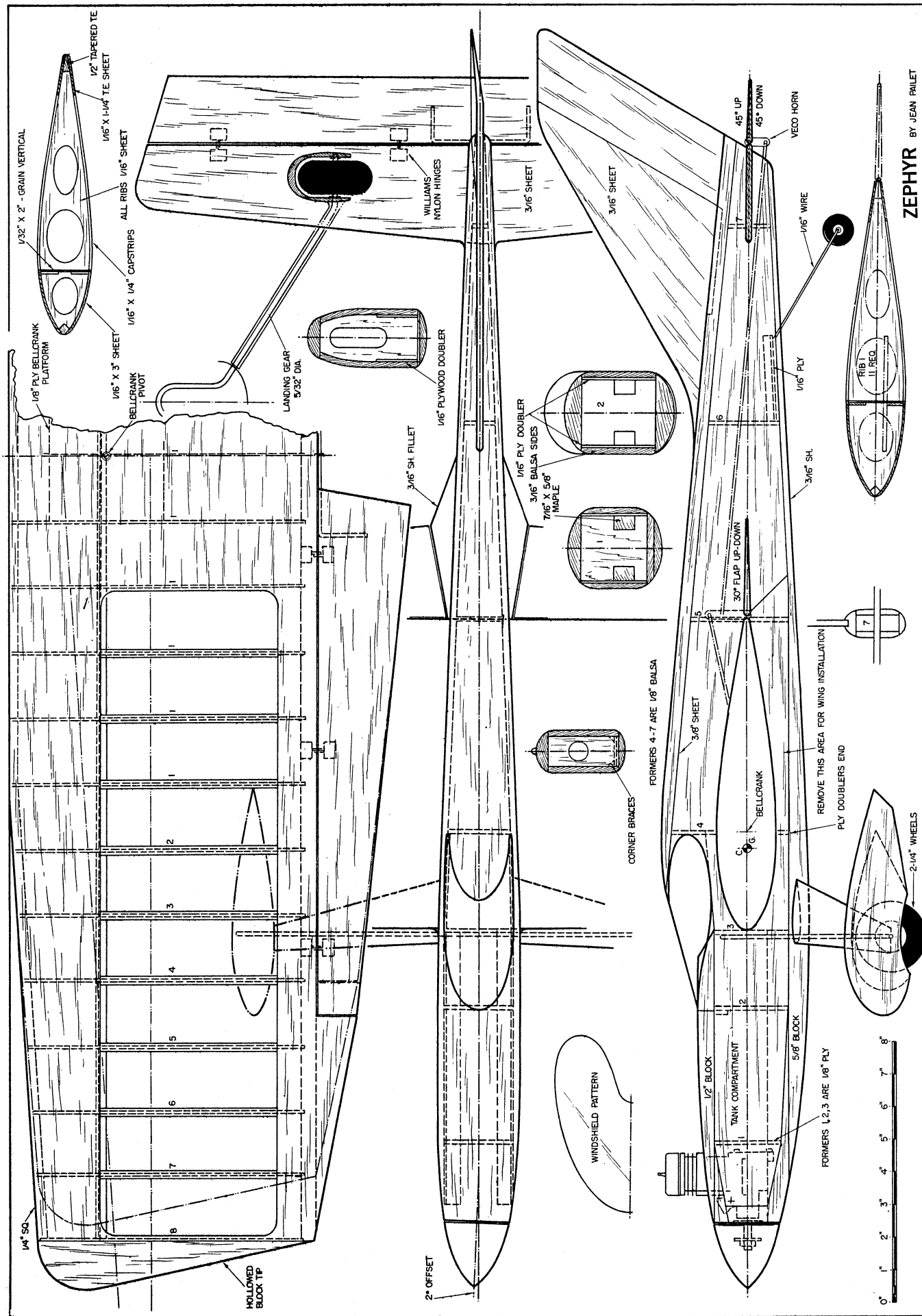






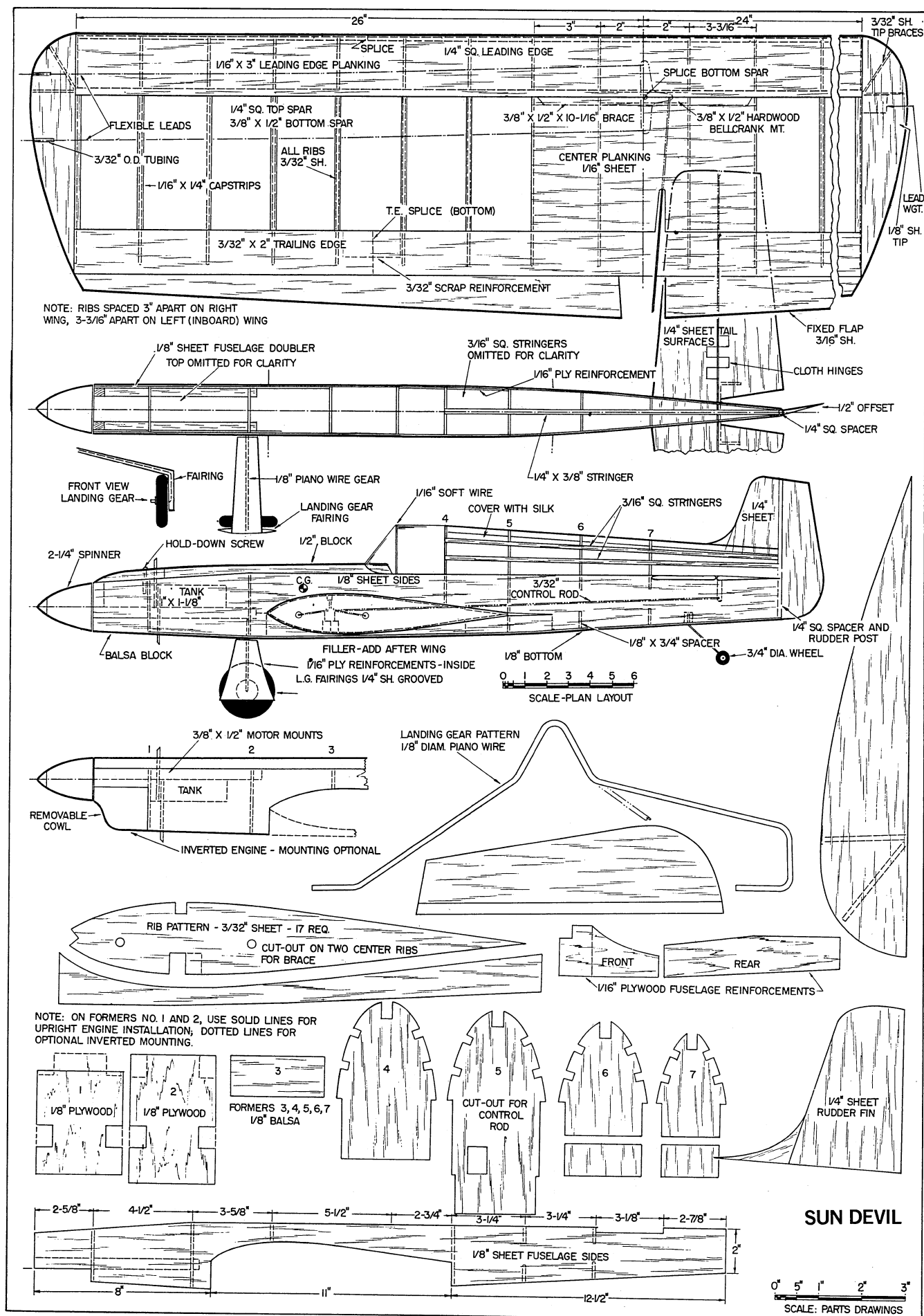




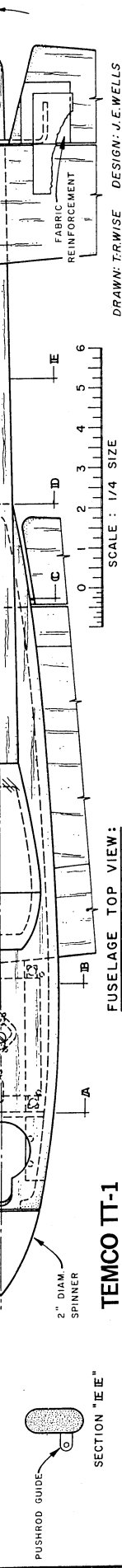
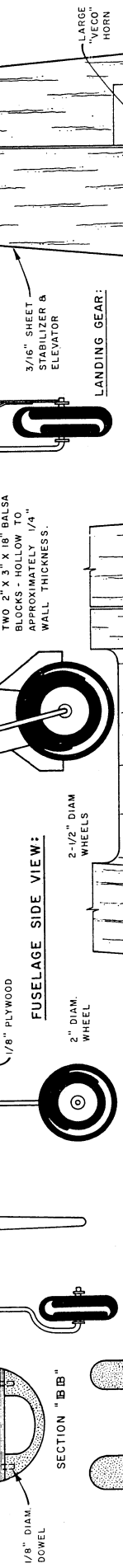
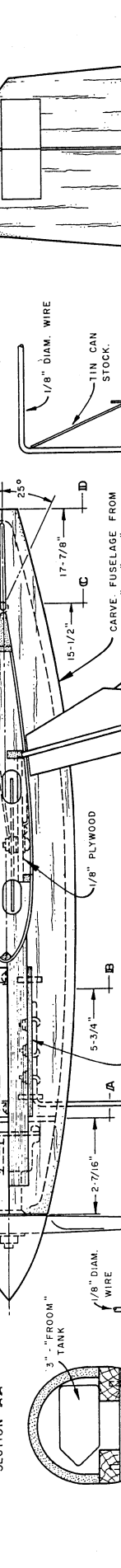
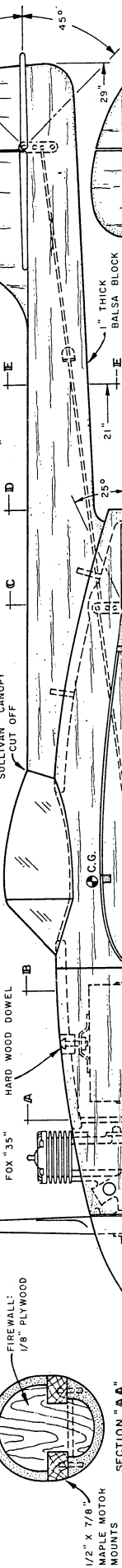
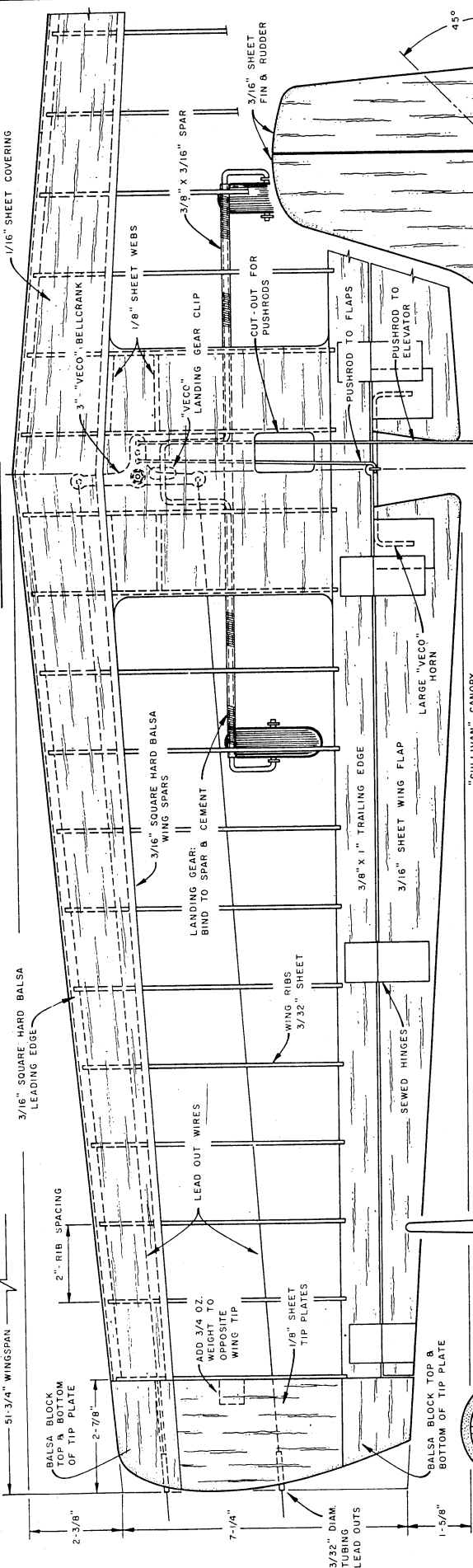


**ZEPHYR** BY JEAN PAILET





# WING PLAN VIEW:

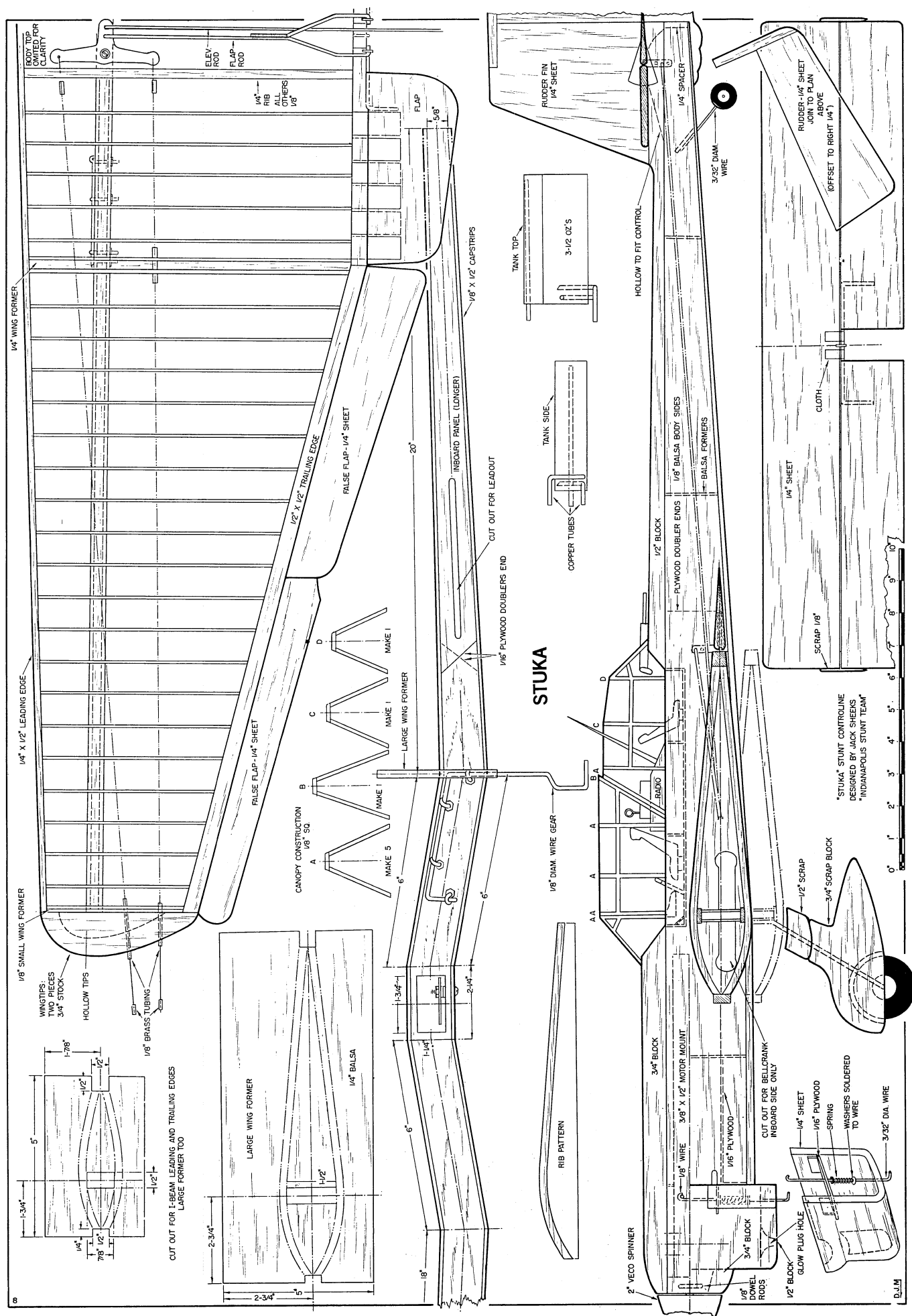


TEMCO TT-1

FUSELAGE TOP VIEW:

SCALE: 1/4" SIZE

DRAWN: T.R.WISE DESIGN: J.E.WELLS



TIP BLOCK 4/8" X 2-1/4" X 5-1/4" - HOLLOW

LEADOUTS

1/8" X 1/2" LE

1/16" SHEET

1/16" X 1/4" CAPSTRIPS

MAIN T.E. 3/16" X 1/2"

TIP T.E. - 3/32" SHEET

3/16" SQ SPARS

A - 1 REQ

A2 (2 REQ)

D1, D2 (1 EACH REQ)

B1 (2 REQ)

H (2 REQ)

D2 ONLY

E (2 REQ)

B2 (2 REQ)

I (2 REQ)

CUT OUT AFTER ASSEMBLY FOR LANDING GEARS

F (2 REQ)

B3 (1 REQ)

J (2 REQ)

LANDING GEAR SLOT, RIGHT SIDE ONLY

G (2 REQ)

C (2 REQ)

K (2 REQ)

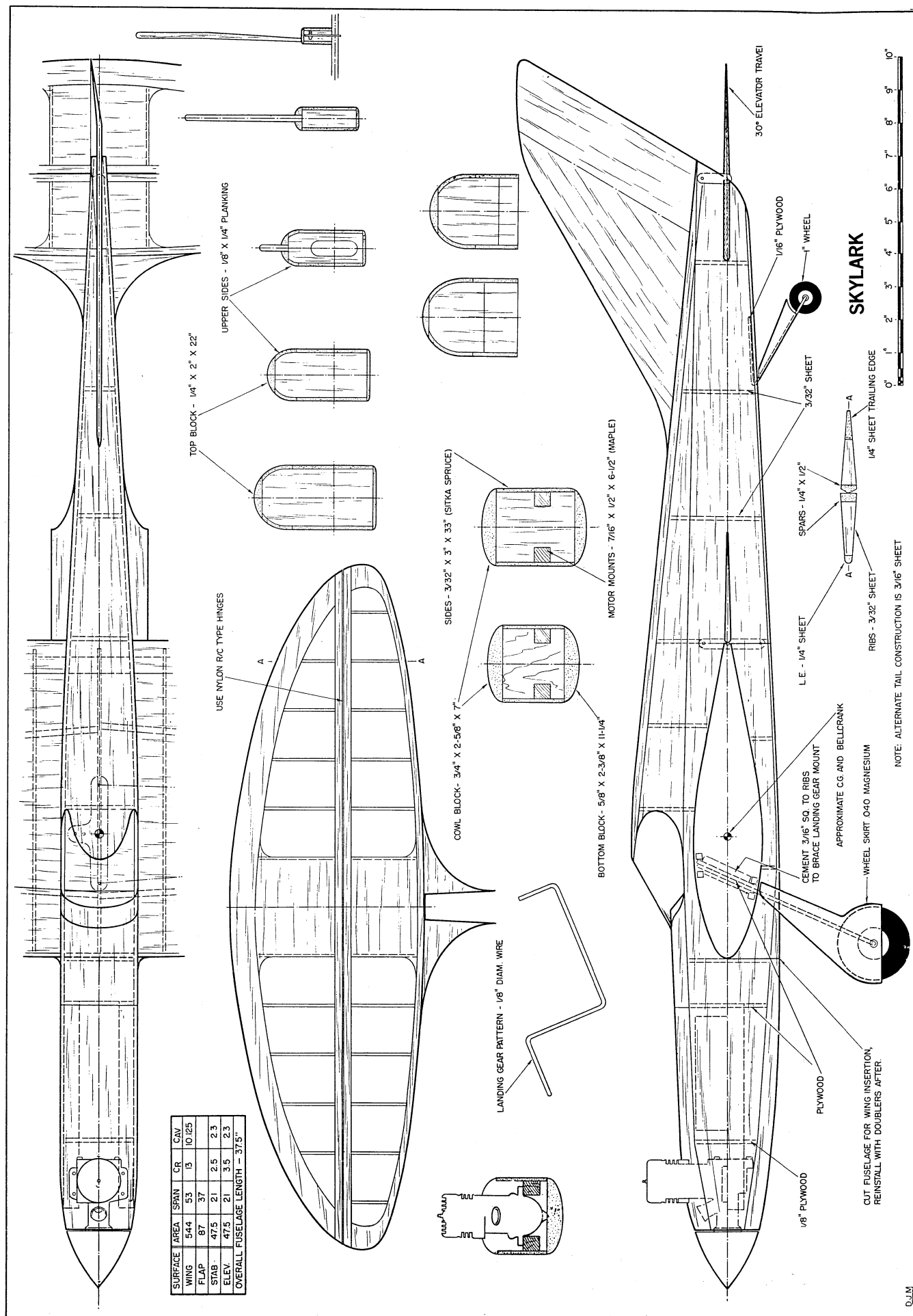
3/16" SQ  
GEAR  
BRACES

COVER AND DOPE WING BEFORE  
INSTALLING IN FUSELAGE.

DJM

0" 1" 2" 3" 4" 5" 6" 7" 8" 9" 10"



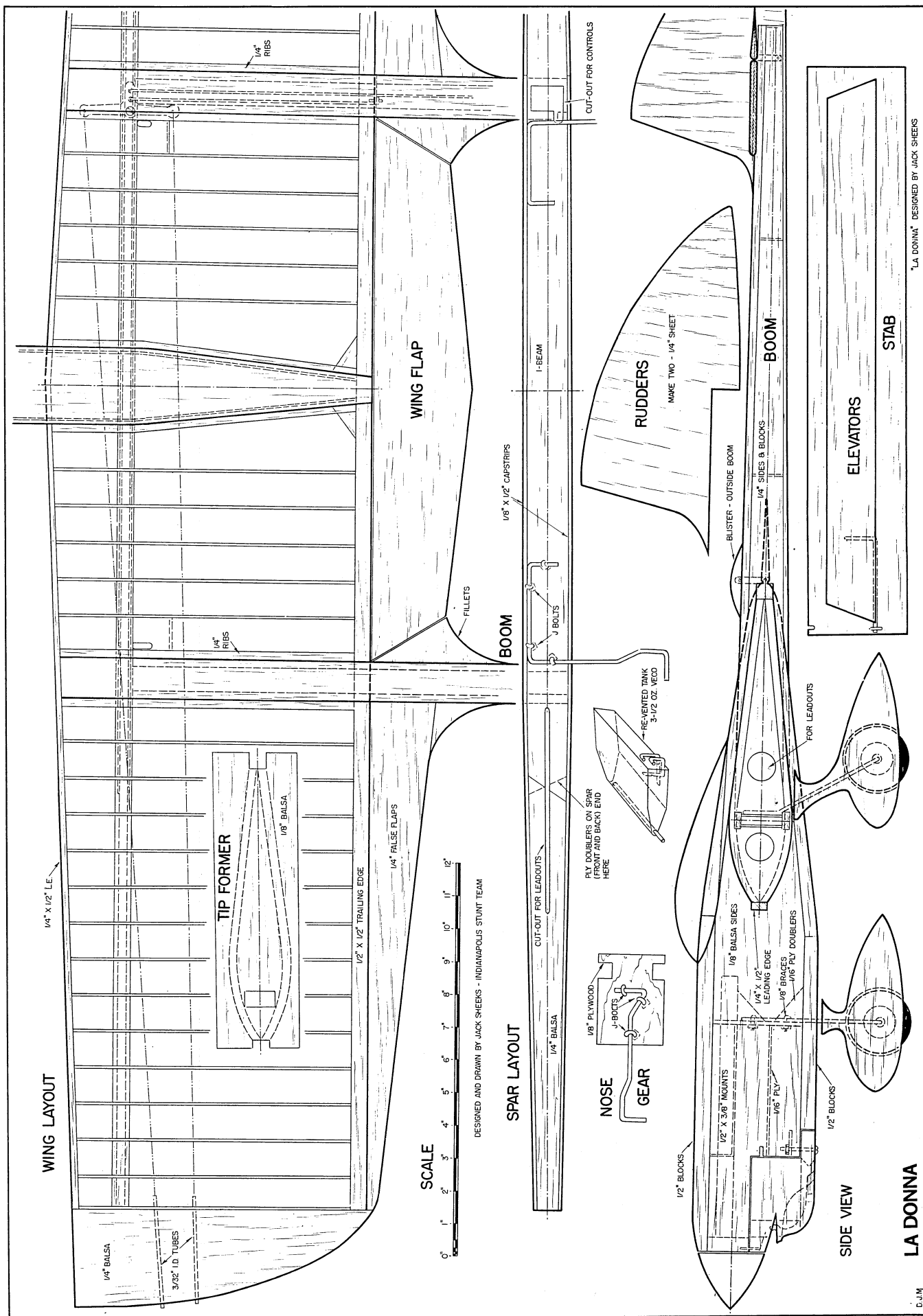


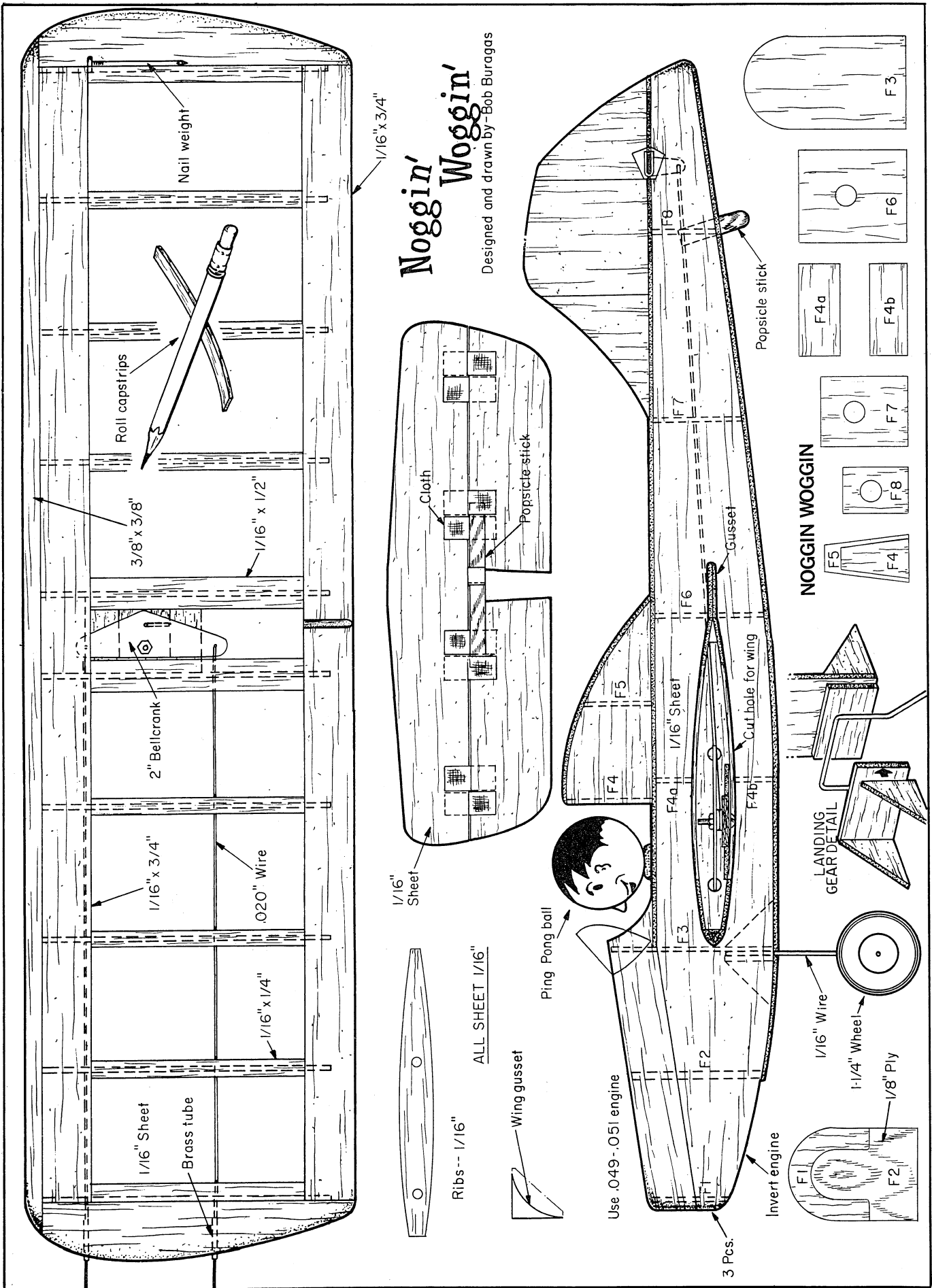


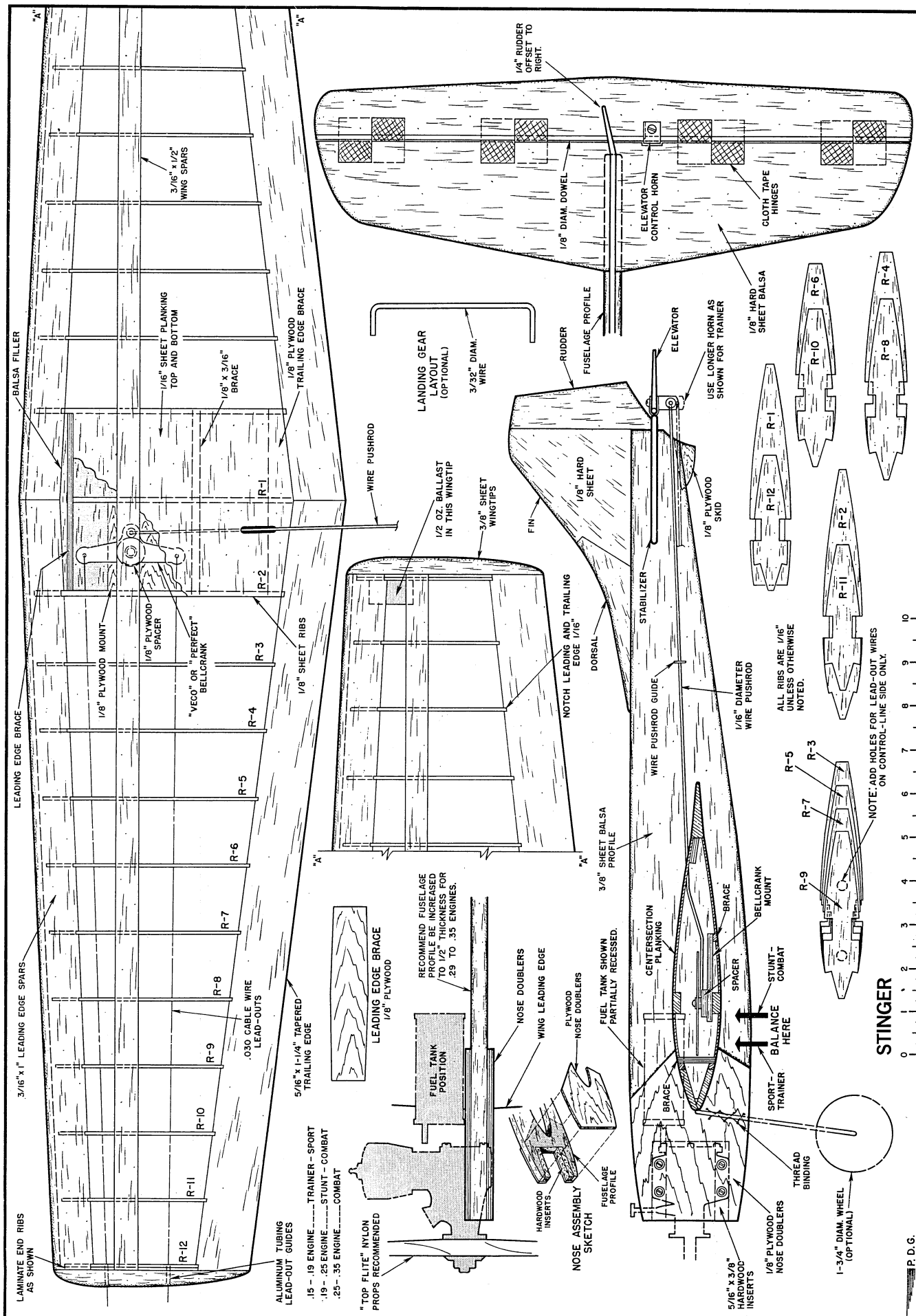


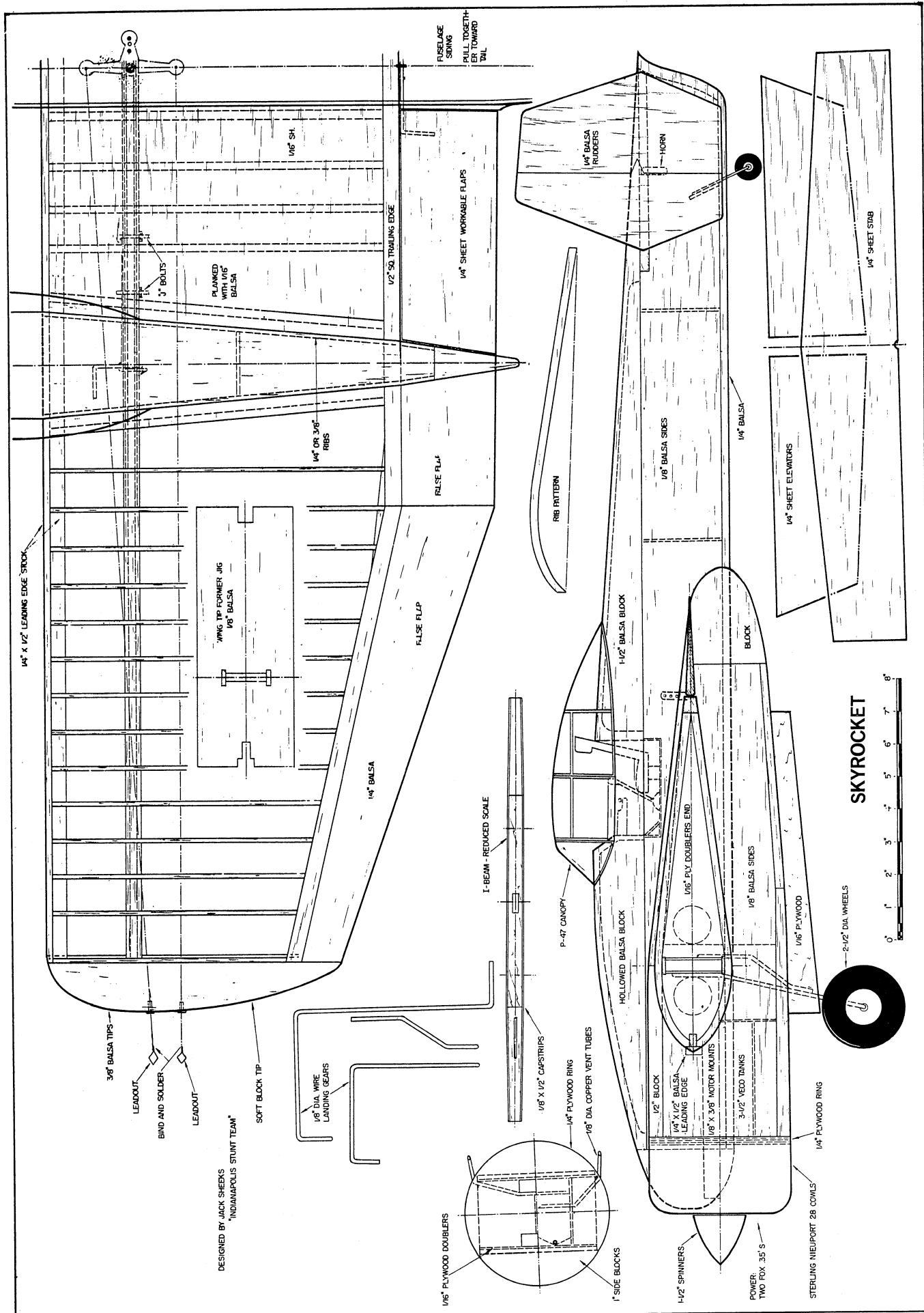




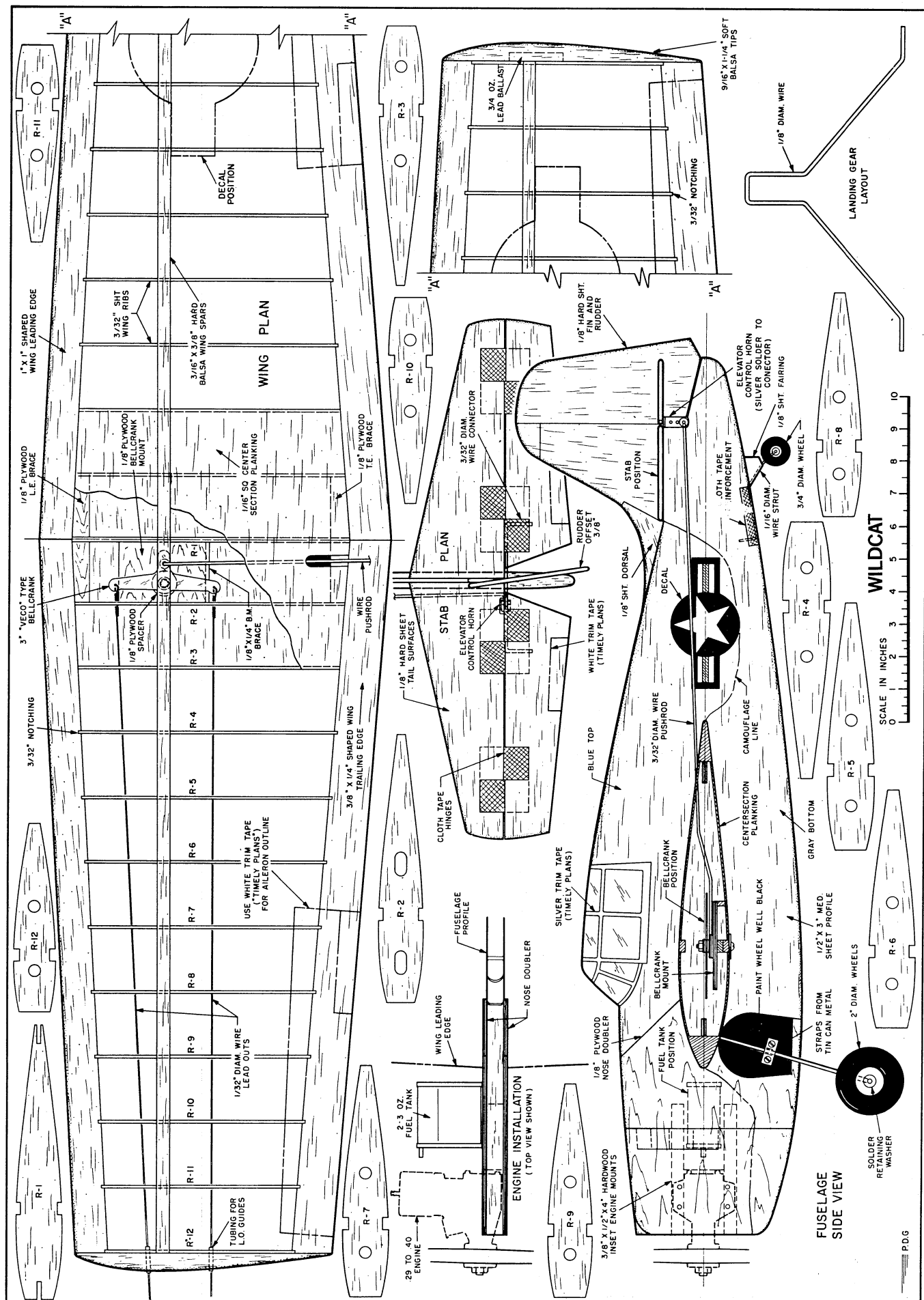


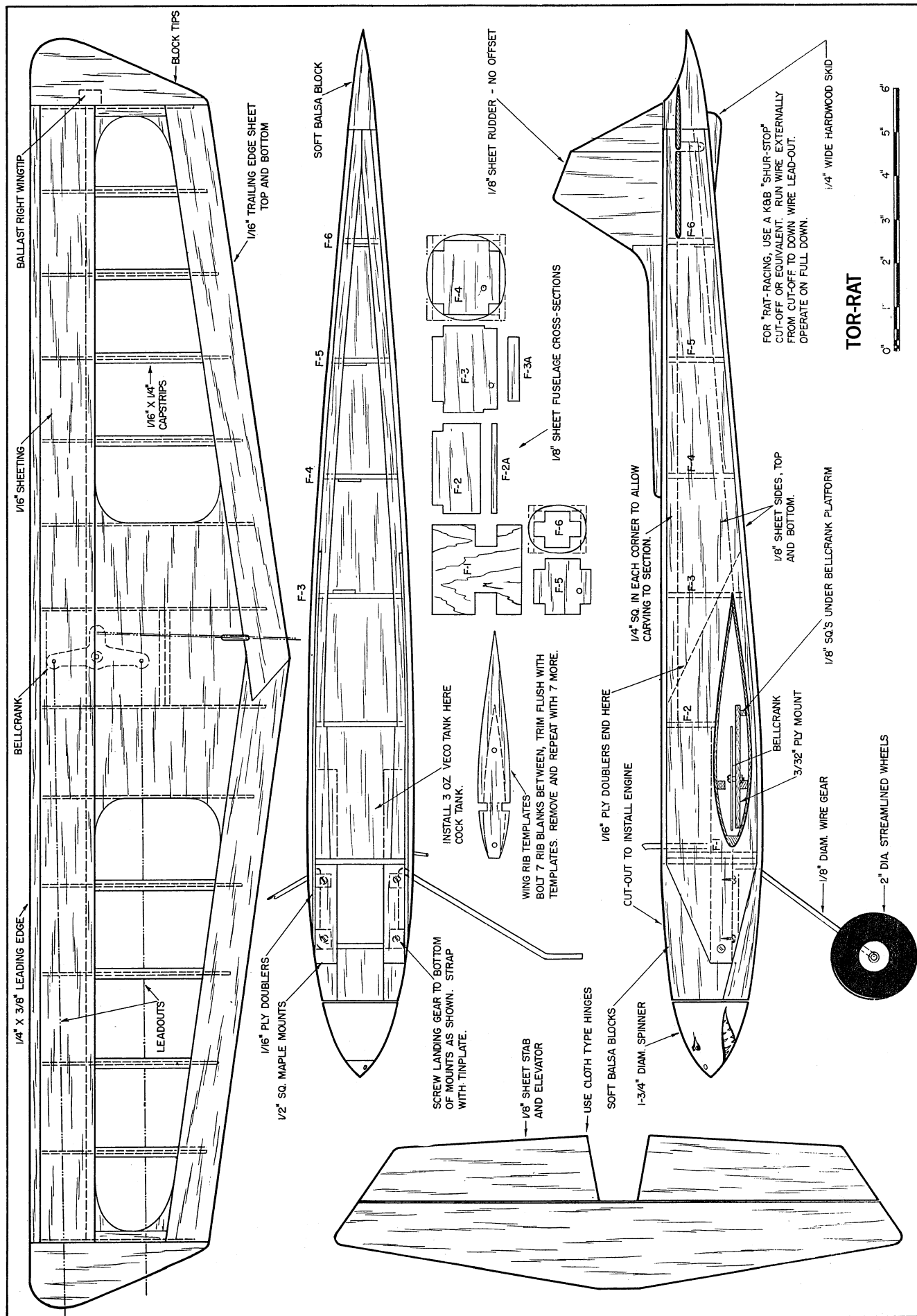




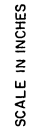




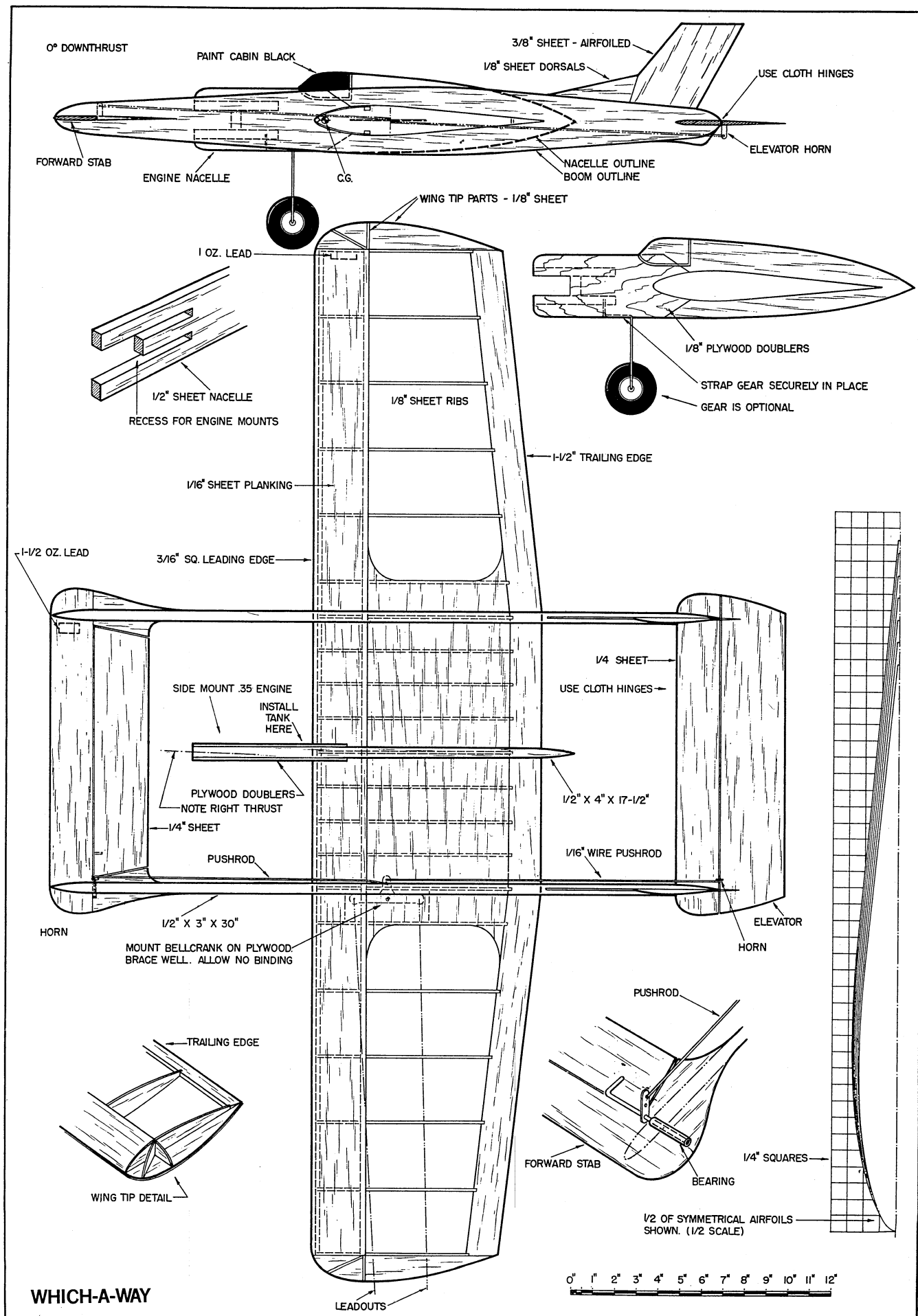












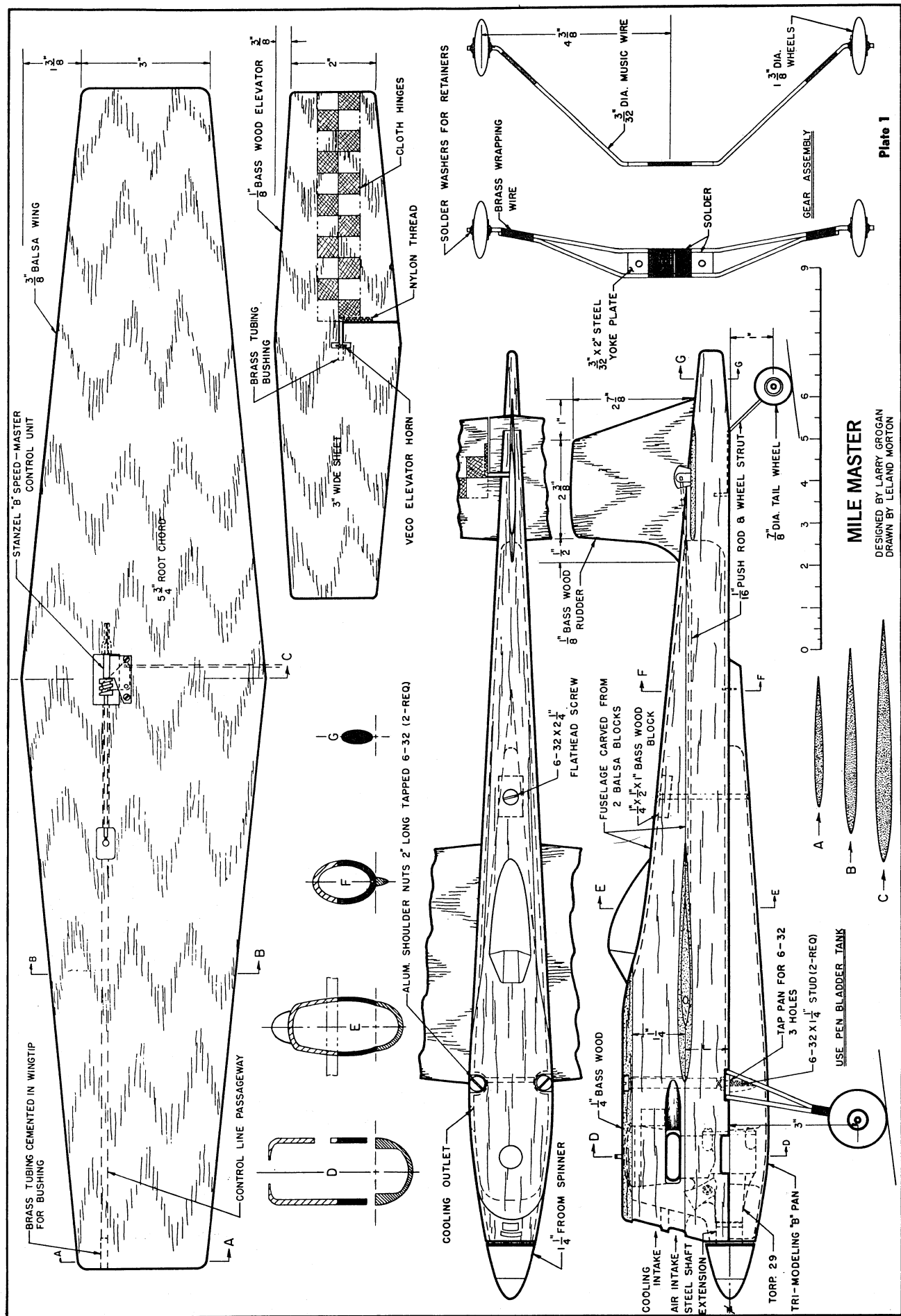
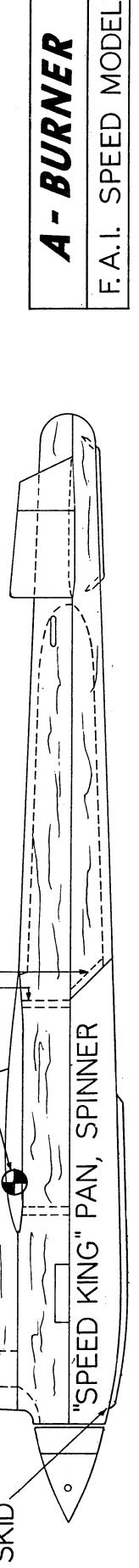
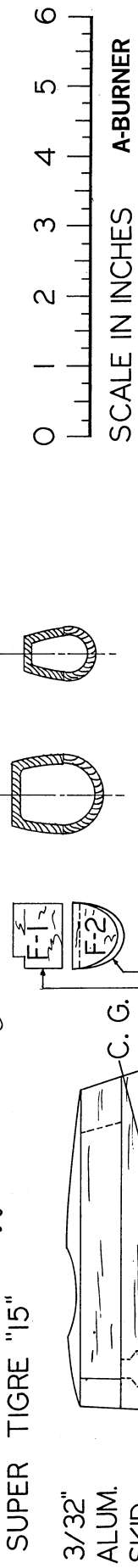
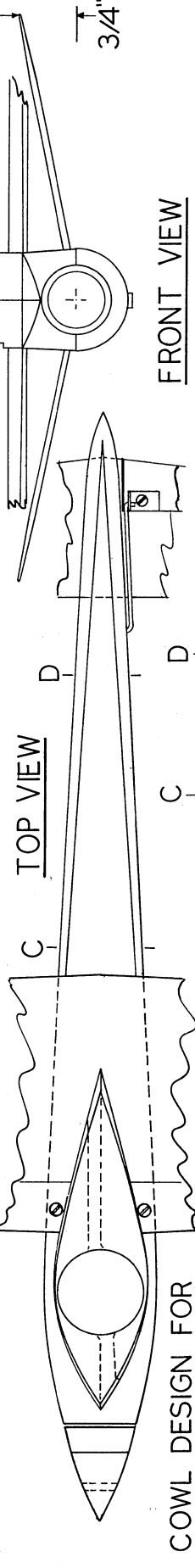
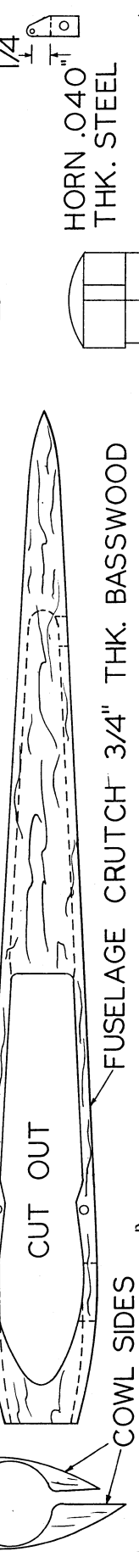
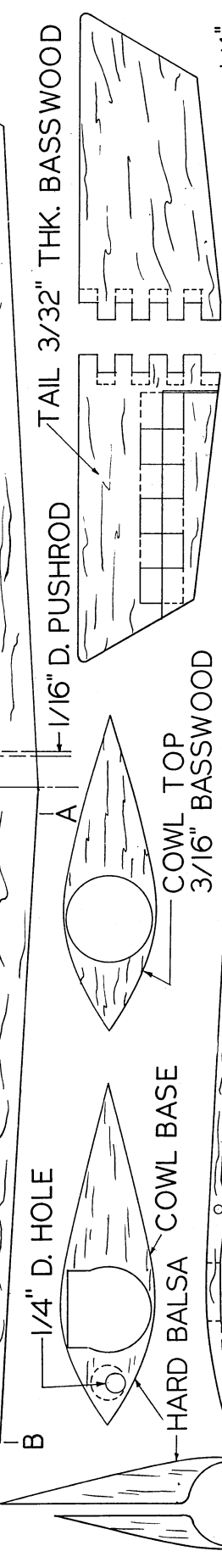
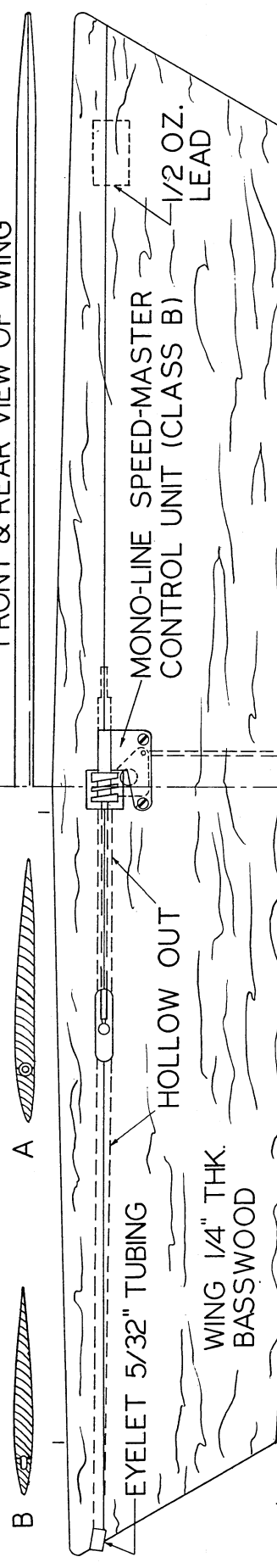


Plate 1

FRONT & REAR VIEW OF WING



FRONT VIEW

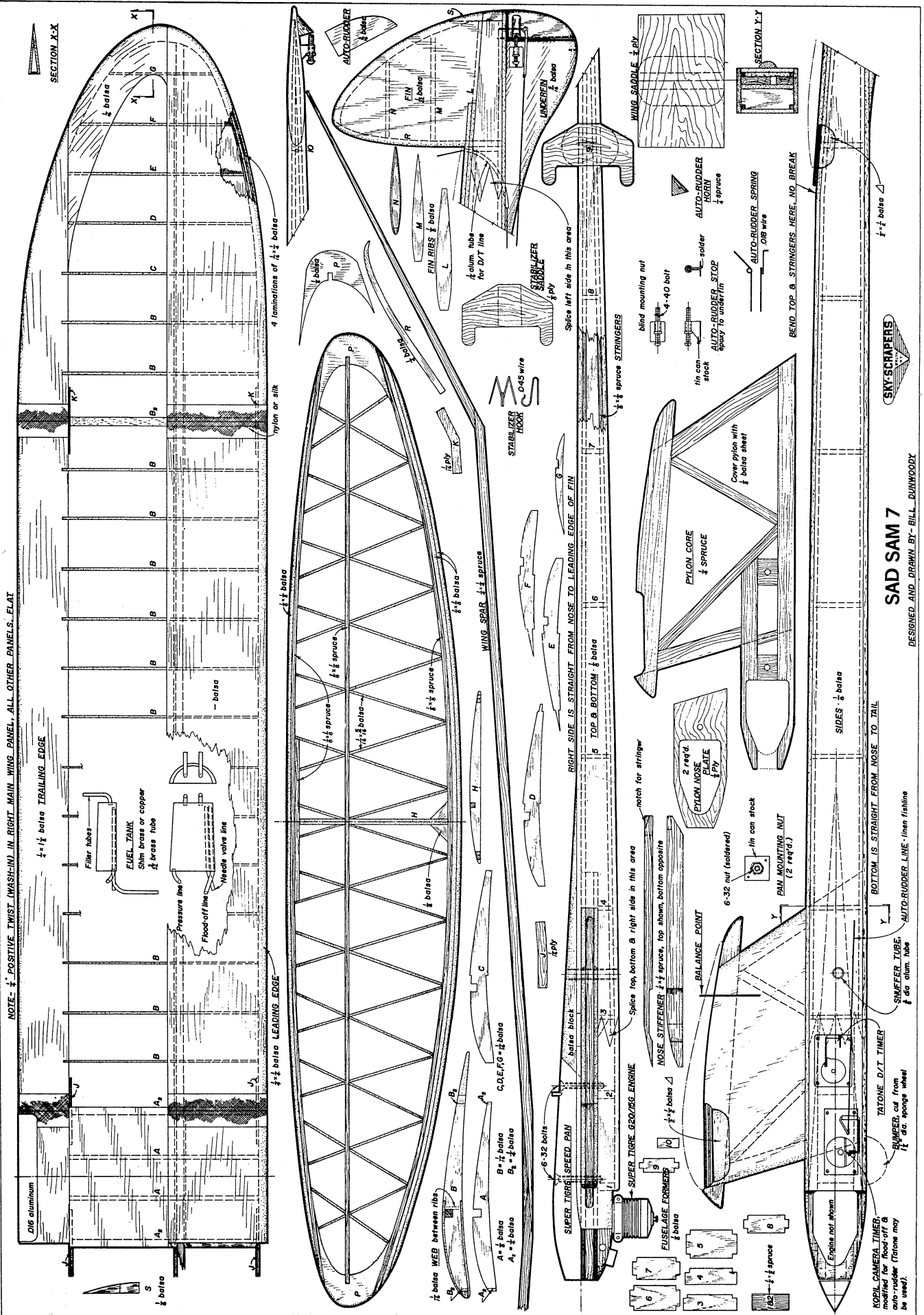


**A - BURNER**

F.A.I. SPEED MODEL



NOTE:  $\frac{1}{4}$ " POSITIVE TWIST (WASH-IN) IN RIGHT MAIN WING PANEL, ALL OTHER PANELS, FLAT

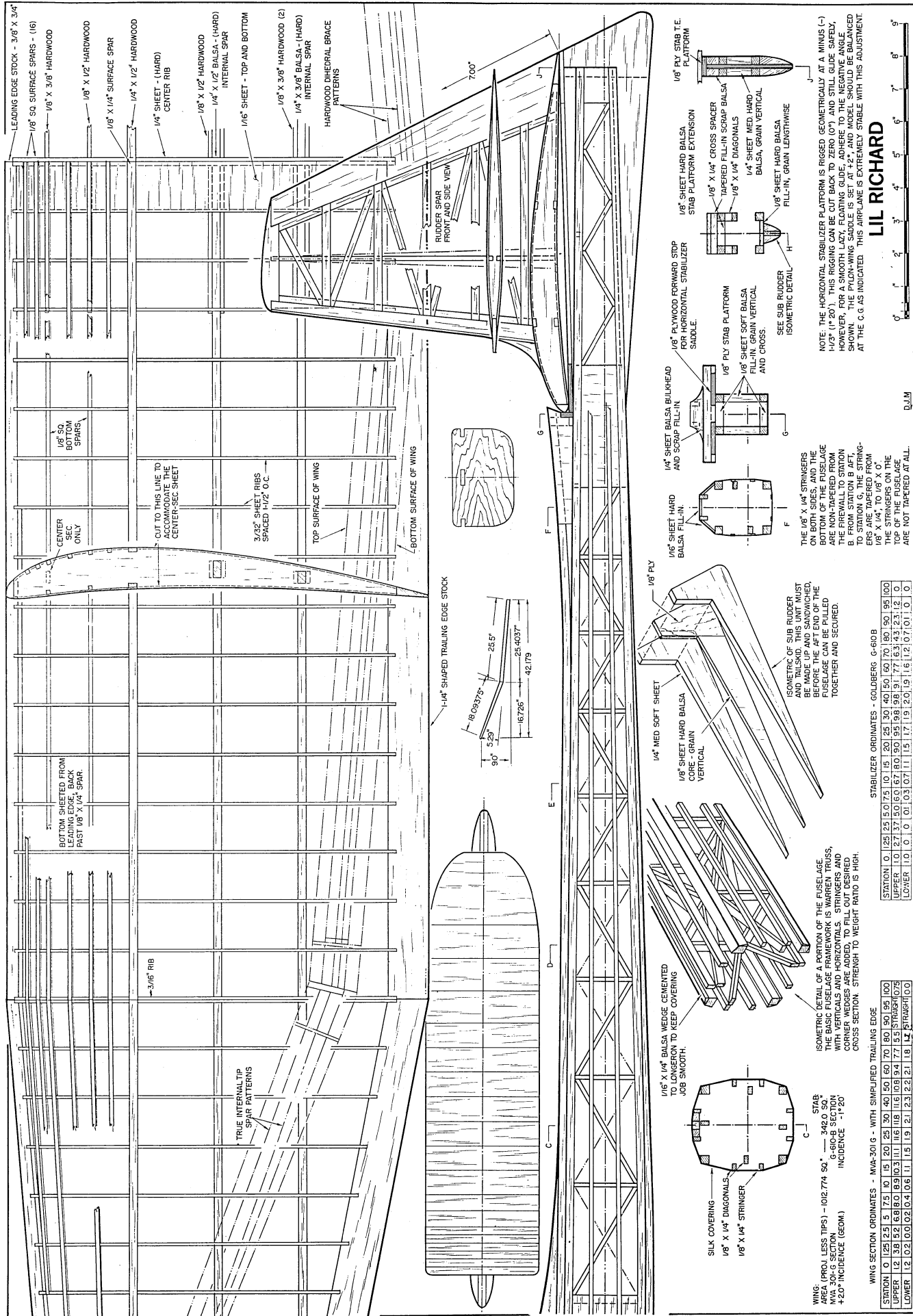


# SAD SAM 7

DESIGNED AND DRAWN BY: BILL DUNWOODY

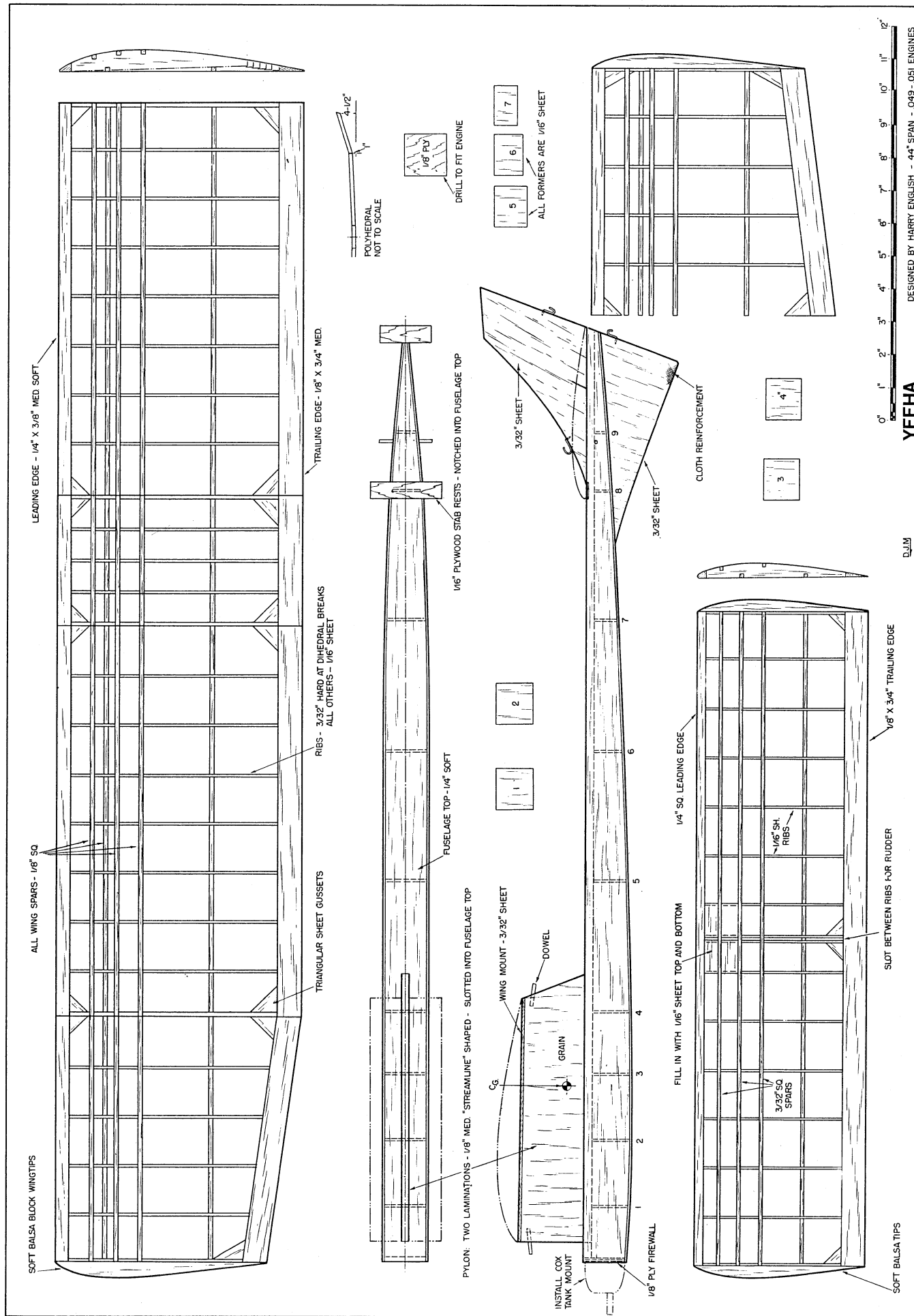






# LIL RICHARD

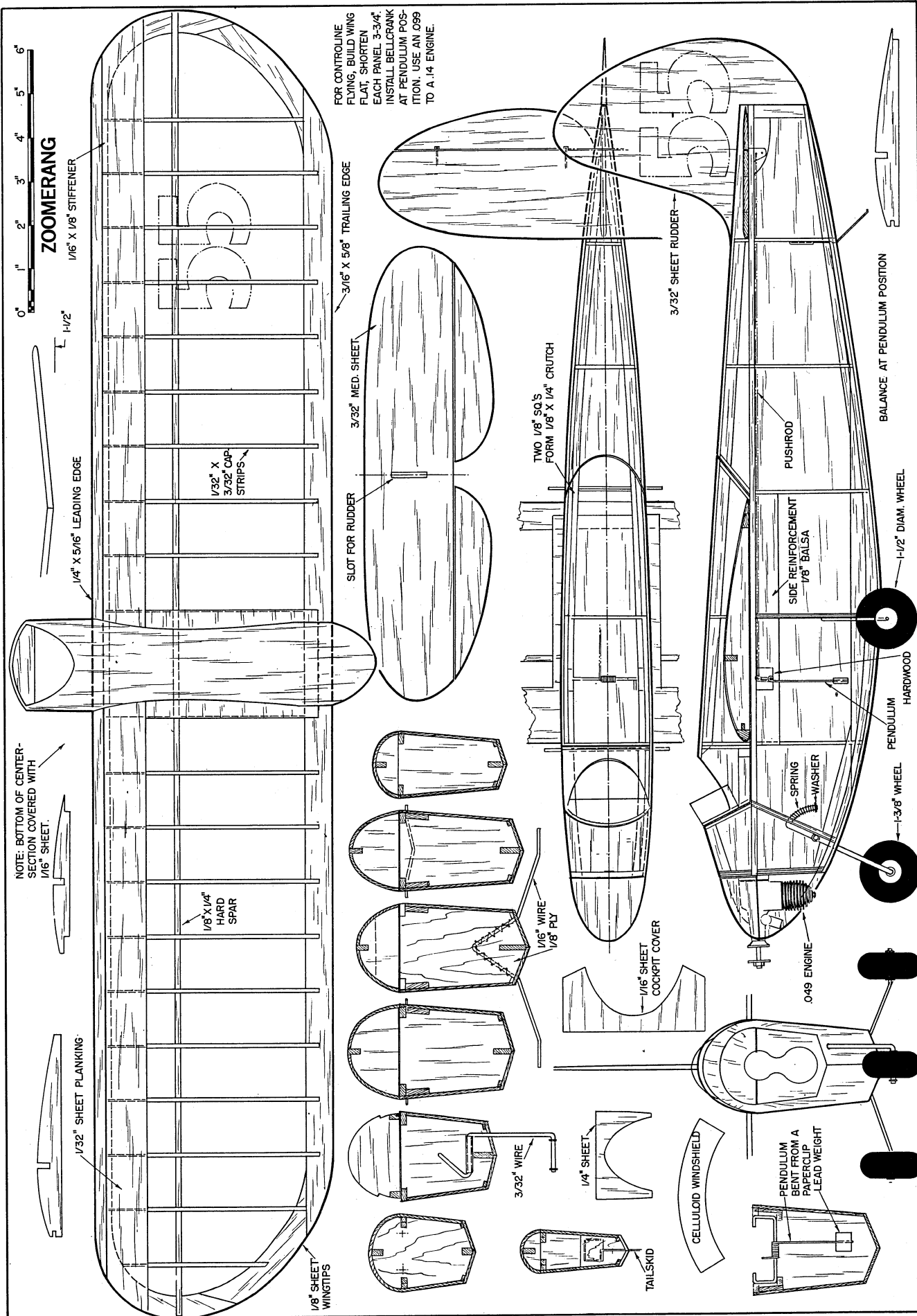
NOTE: THE HORIZONTAL STABILIZER PLATFORM IS RIGGED GEOMETRICALLY AT A MINUS (-) 1-1/3° (+20'). THIS RIGGING CAN BE CUT BACK TO ZERO (0°) AND STILL GUIDE SAFELY, HOWEVER, FOR A SMOOTH LIFT, FLOATING GUIDE, ADHERE TO THE NEGATIVE ANGLE SHOWN. THE FLYING-WING SQUARE IS SEEN IN THE CROSS SECTION. THIS AIRPLANE IS EXTREMELY STABLE WITH THIS ADJUSTMENT AT THE C.G. AS INDICATED.



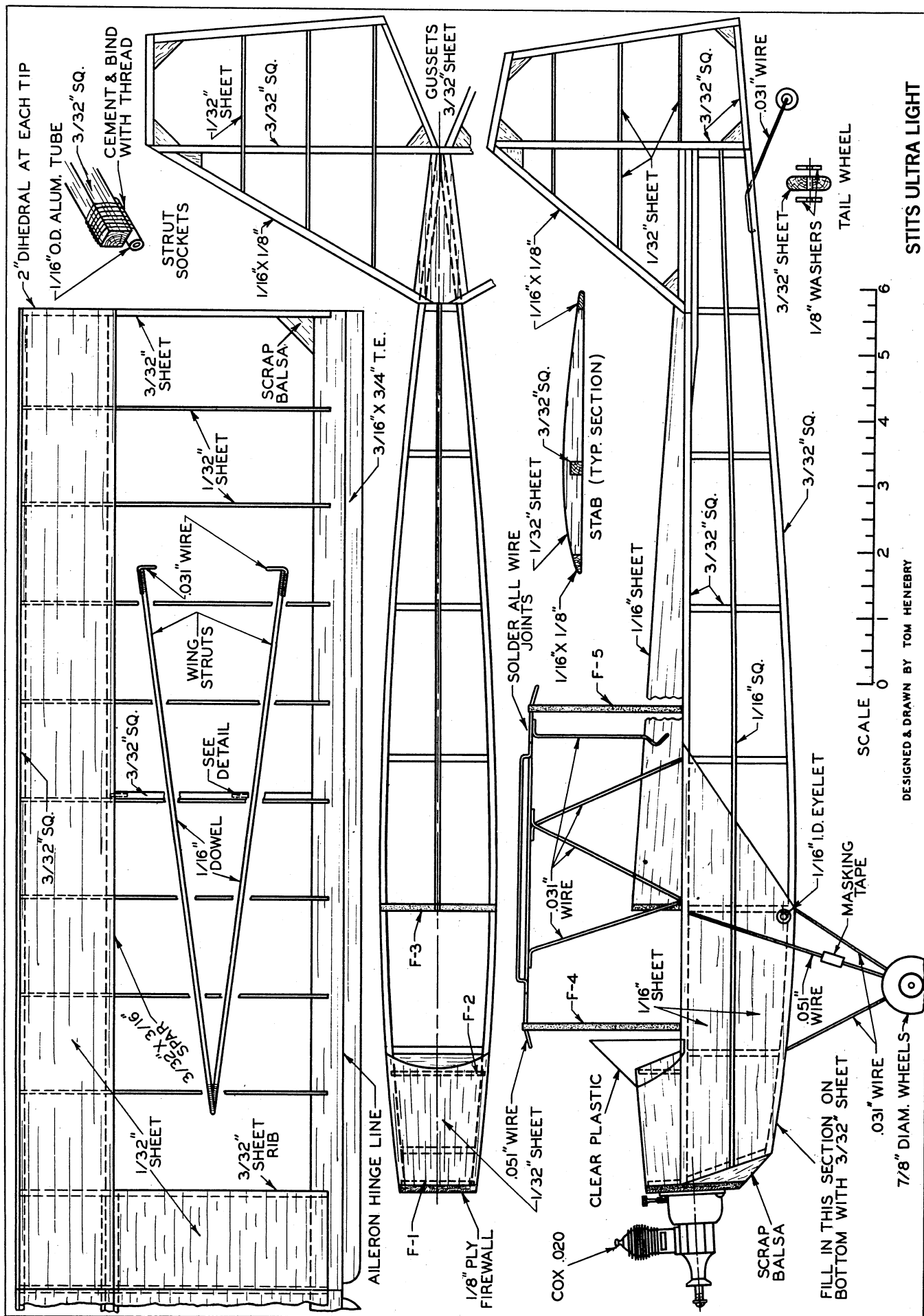




















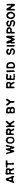


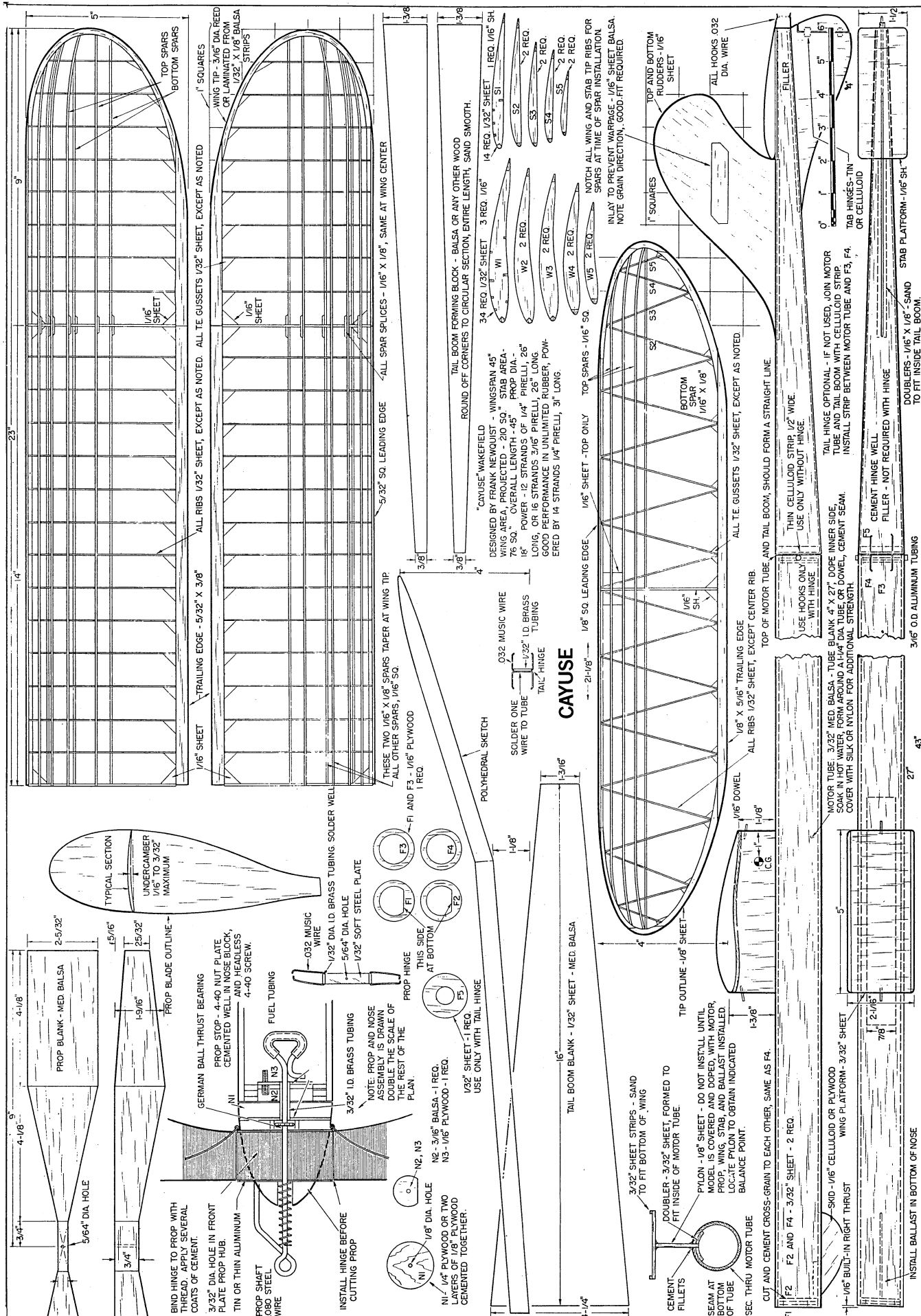






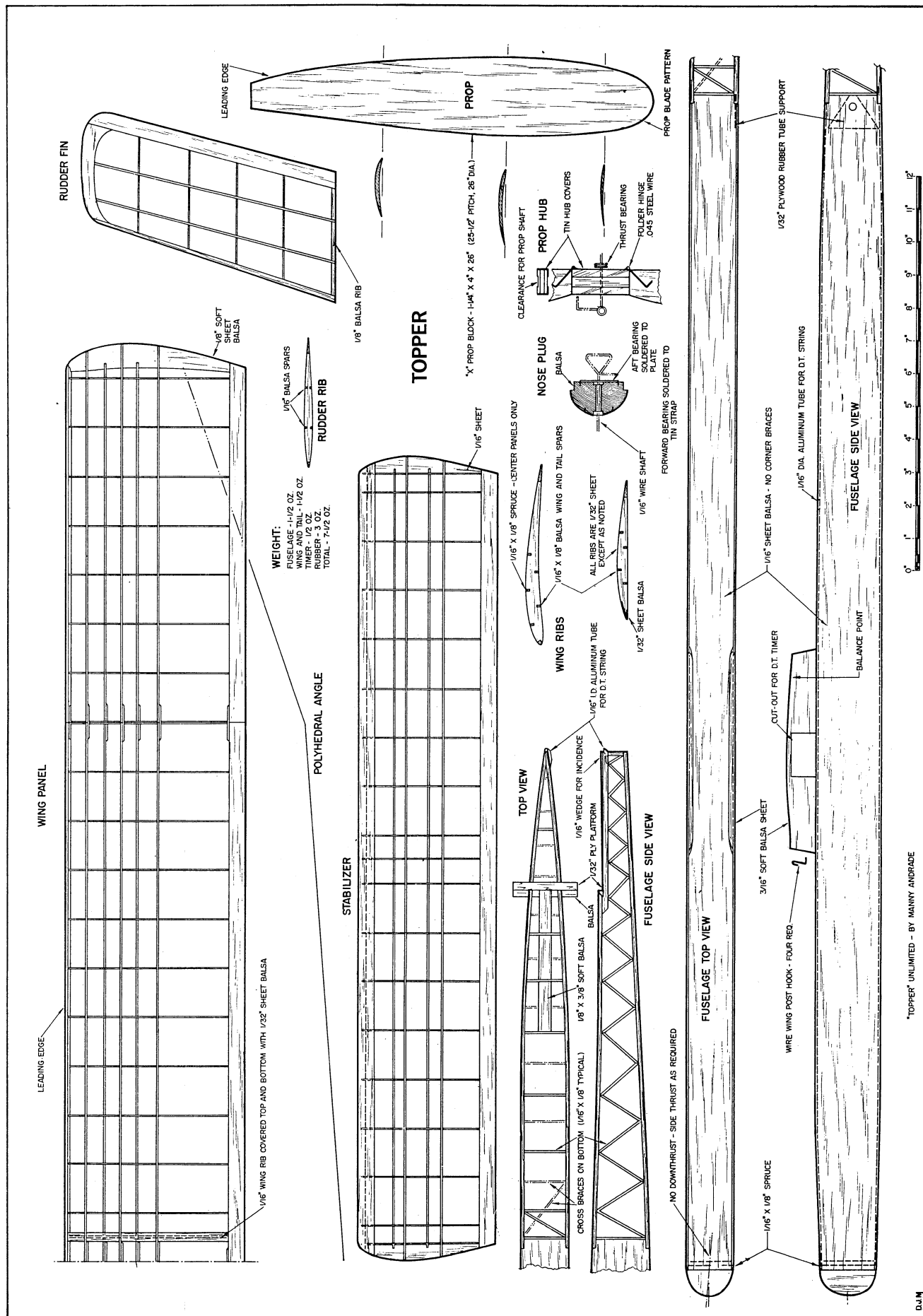


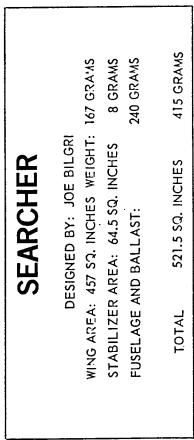




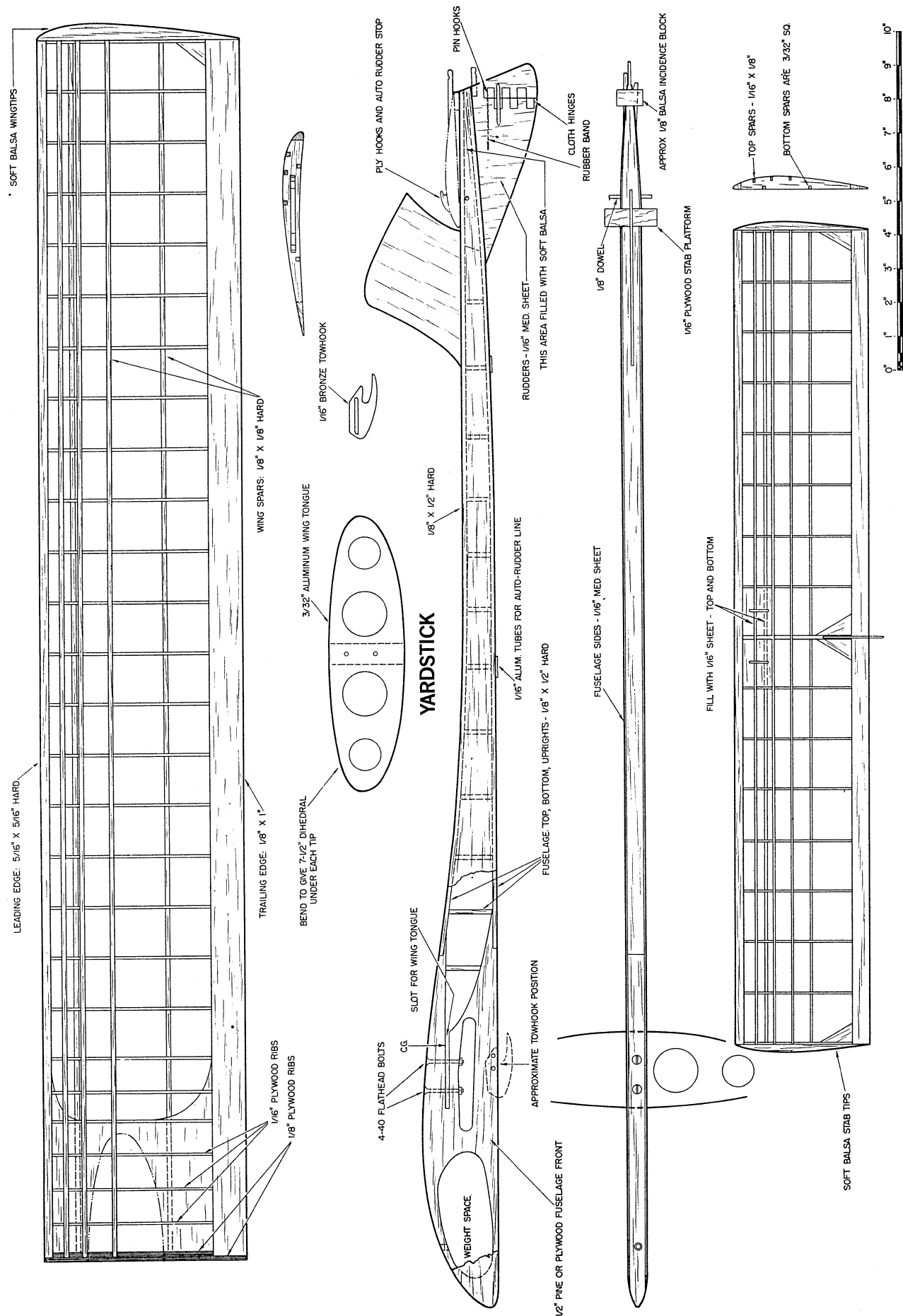




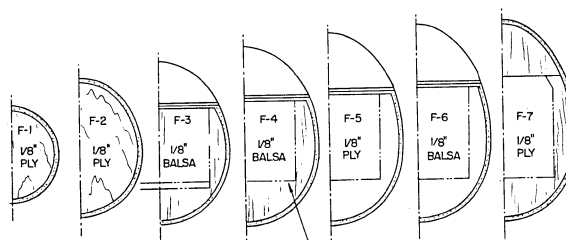
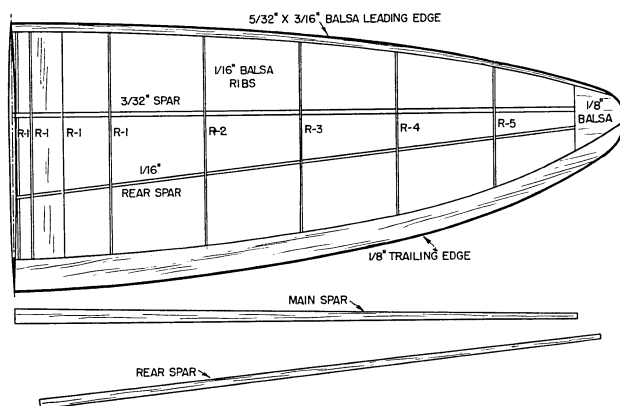
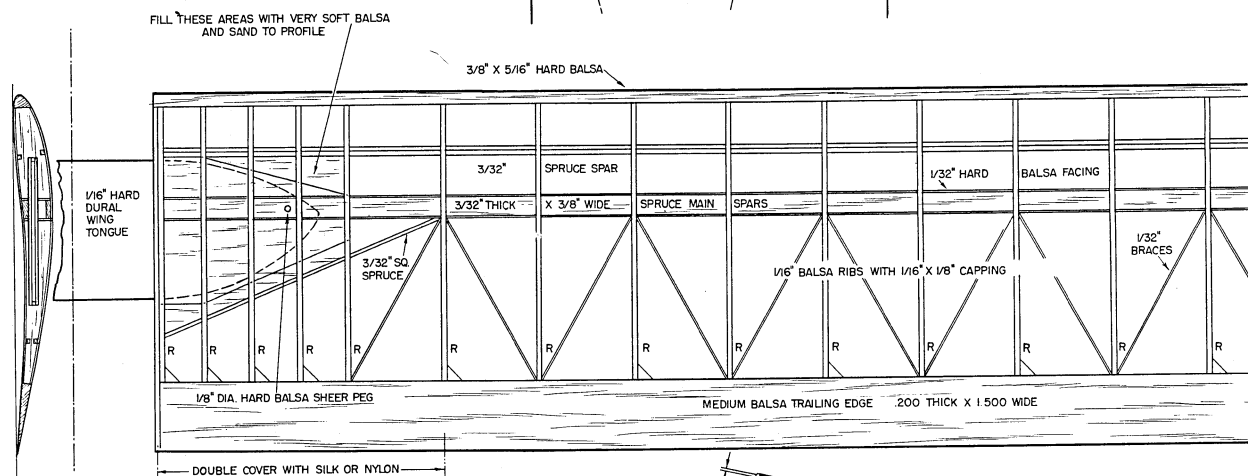
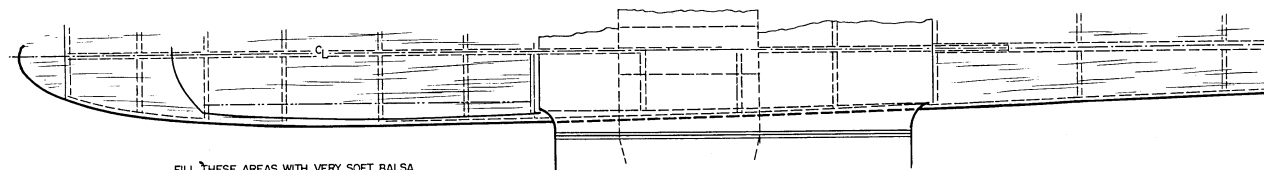
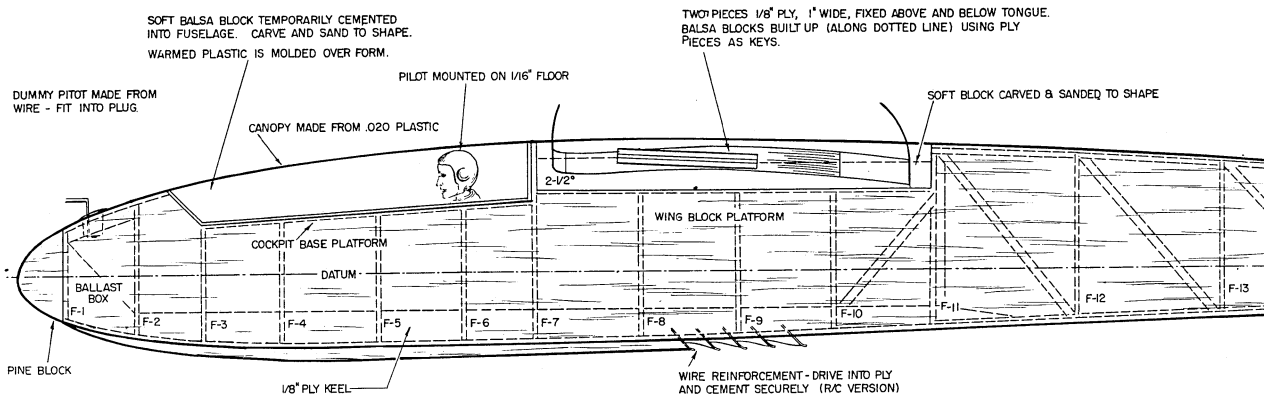






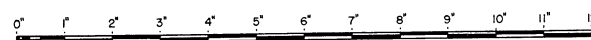






1/8" SCRAP PIECES MAY BE USED TO SUPPORT FORMERS WHEN ASSEMBLING HALVES TOGETHER

CUT OUT TO SUIT RADIO CONTROL EQUIPMENT



TON-UP

PACKING STRIP "A" TO GIVE WING WASHOUT PACKING STRIP "B"

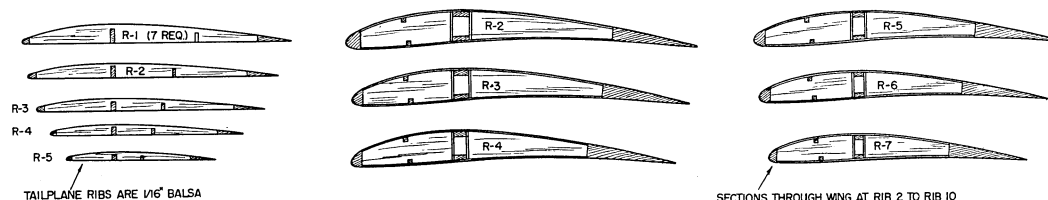
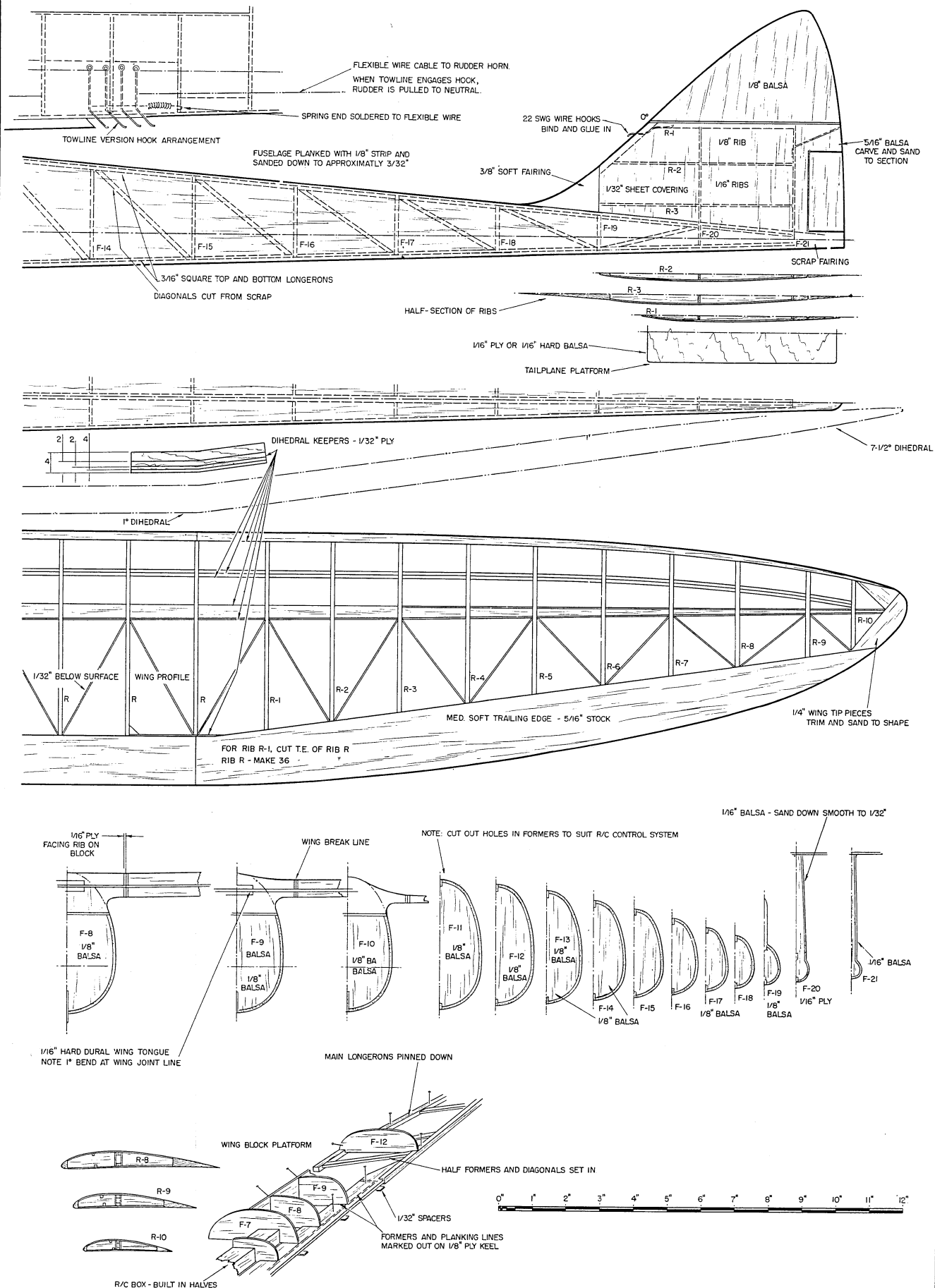
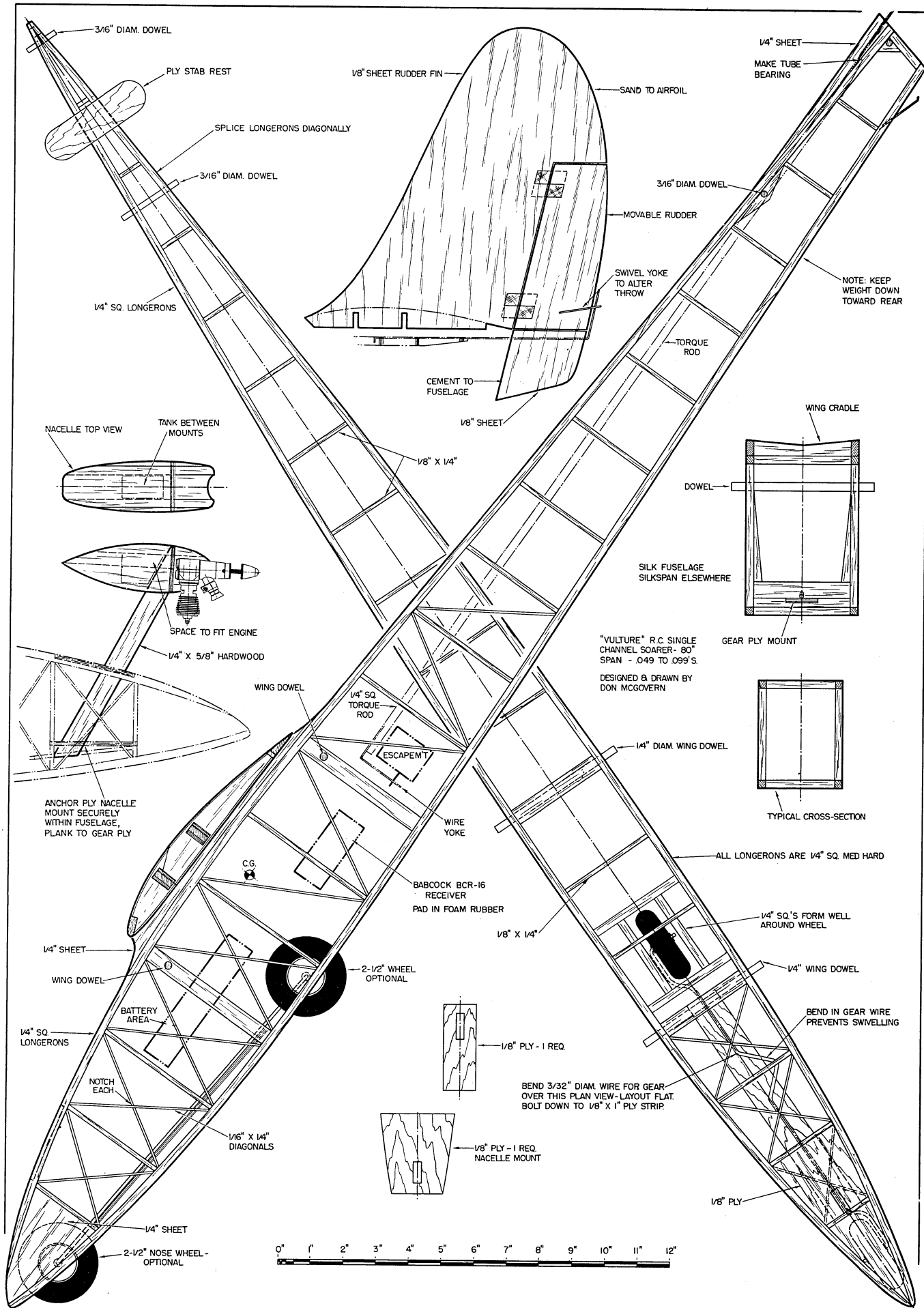


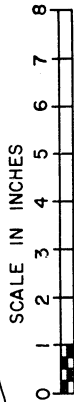
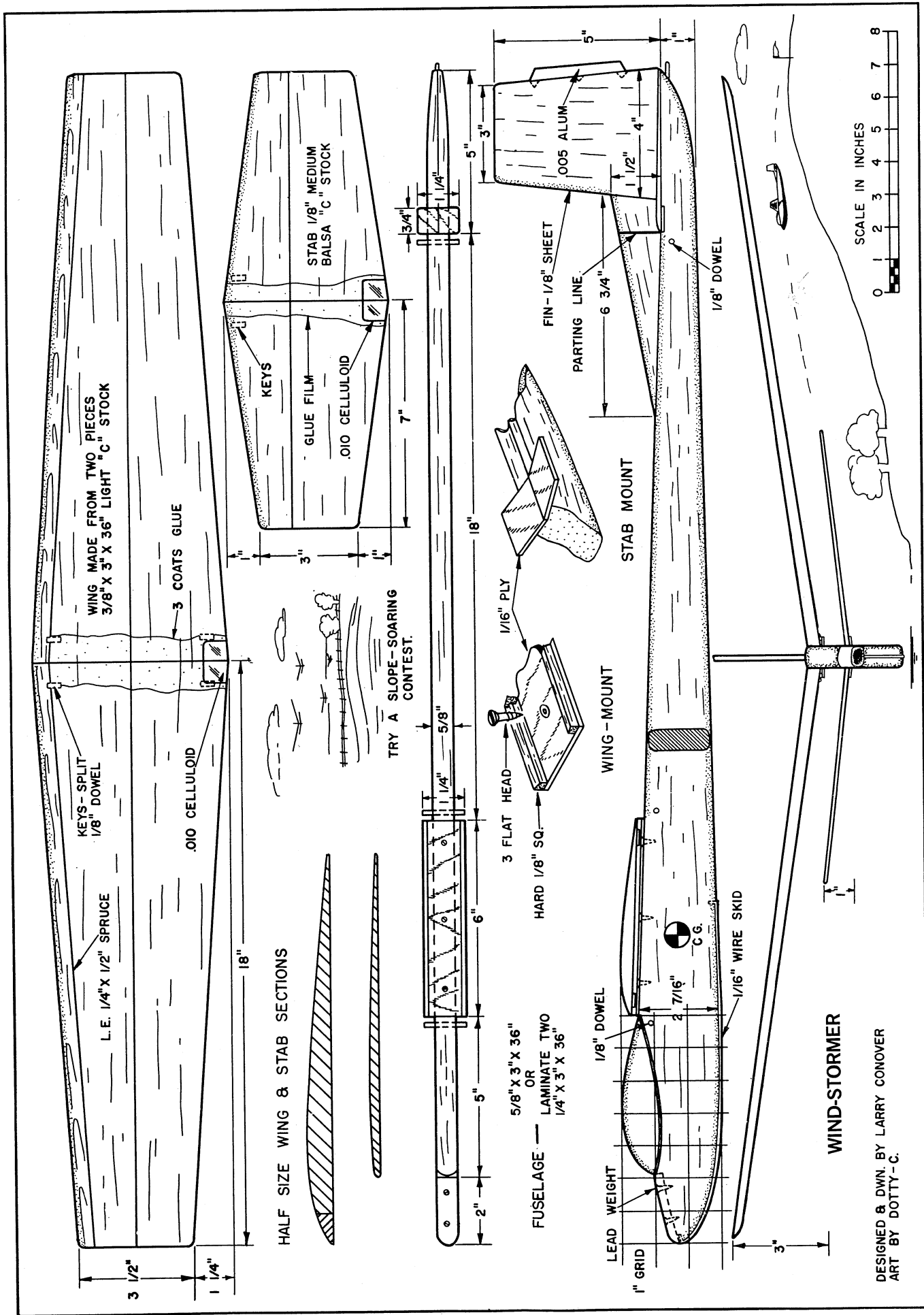
PLATE 1 "TON-UP" - DESIGNED BY S.B. SWANSTON











# WIND-STORMER

DESIGNED & DWN. BY LARRY CONOVER  
ART BY DOTTY-C.



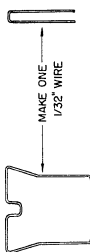
FLY IN CALM WEATHER

ALL GUSSETS ARE 1/16" X 3/16" HARD Balsa STRIP  
WING AND STAB ARE EASY TO BUILD, LIGHT

# MOTHER-HAWK

## SQUAWK HAWK

WIRE FITTINGS

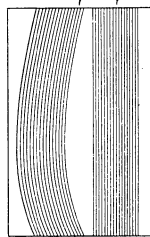


FUSELAGE DOUBLERS - TYPICAL FORMERS



### STRIPPING RIBS

CUT MED 1/16" SHEET TO EXACT CHORD LENGTHS, PRE-COAT END-GRAIN WITH CEMENT, BEFORE RAZOR STRIPPING

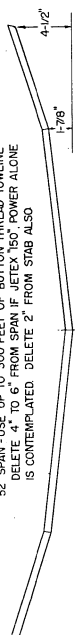


"MOTHER-HAWK" WING  
52" SPAN - USE UP TO 300 FEET OF BUTTON THREAD TOWLINE  
DELETE 4" TO 6" FROM SPAN IF JETEX "50" POWER ALONE  
IS CONTEMPLATED. DELETE 2" FROM STAB ALSO

USE TEMPLATE FOR TOP CAMBER STRIPS

STRAIGHT BOTTOM CAMBER STRIPS  
(STAB BUILT IN LIKE MANNER-USE  
SAME TEMPLATE-SHORTEN SHEET

POLYHEDRAL-DIHEDRAL DETAILS



"MOTHER-HAWK" TOP VIEW

1/16" SHEET

3/16" X 1/2"

DOUBLERS

DOVEL

OPEN

DOVEL

OPEN

DOVEL

REINFORCE THIS DOVEL

1/16" SHEET TOP AND BOTTOM

1/16" SHEET STAB REST

DOVEL

PLY BRACE

"SQUAWK-HAWK" STABILIZER

SOFT 1/16" SHEET

1/16" SHEET FIN

NOTCHED FOR

POP-UP STAB

1/16" SHEET FIN

TRIM TAB

WIRE FITTING

3/32" SH SIDES

WIRE FITTINGS RETAIN

AFT END IN ALIGNMENT

APPLY CEMENT SKIN TO CENTER

DOVEL

HOOK AND SKID

RUBBER BAND

D.T. HOOK

"SQUAWK-HAWK" WING

3/16" SOFT SHEET, SANDED TO AIRFOIL

ASBESTOS OR ALUMINUM FOIL

TOPE AND POLISH TO SMOOTH FINISH

SCALE

0" 1" 2" 3" 4" 5" 6" 7" 8" 9" 10" 11" 12"

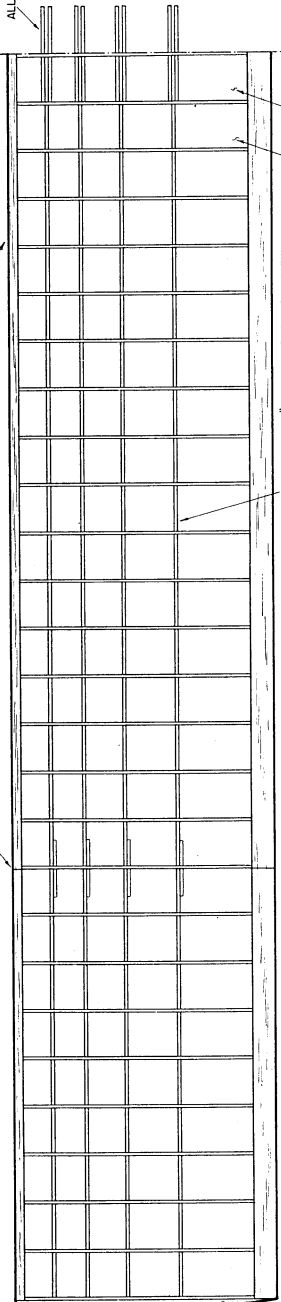
DESIGNED & DRAWN BY DON MCGOVERN

NOTE: USE LIGHT TISSUE ONLY, KEEP WEIGHT DOWN

5/16" BLOCK TIPS - BEVELLED

POLYHEDRAL BREAK- MAKE ONE RIGHT, ONE LEFT

3/16" X 1/4" LEADING EDGE



DOUBLE COVER FIRST TWO CENTER PANELS

1/16" SHEET - MAKE TWO

4-1/2"

1-7/8"

4-1/2"

1-7/8"

4-1/2"

1-7/8"

4-1/2"

1-7/8"

4-1/2"

1-7/8"

4-1/2"

1-7/8"

4-1/2"

1-7/8"

4-1/2"

1-7/8"

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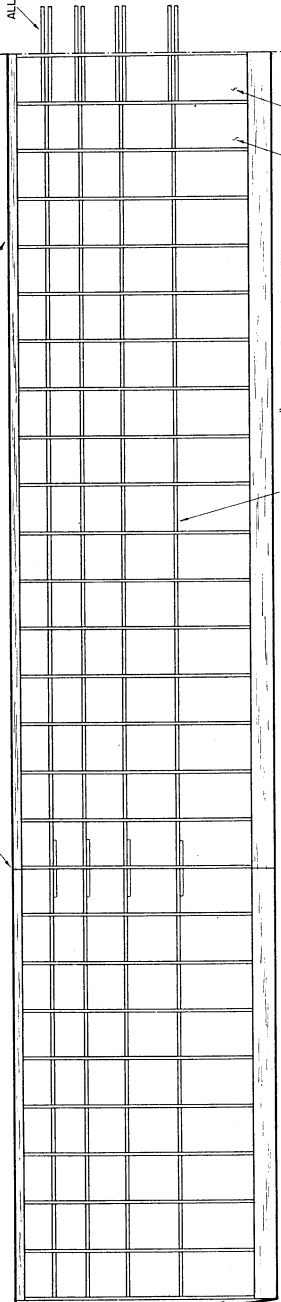
1-7/8"

4-1/2"

5/16" BLOCK TIPS - BEVELLED

POLYHEDRAL BREAK- MAKE ONE RIGHT, ONE LEFT

3/16" X 1/4" LEADING EDGE



DOUBLE COVER FIRST TWO CENTER PANELS

1/16" SHEET - MAKE TWO

4-1/2"

1-7/8"

4-1/2"

1-7/8"

4-1/2"

1-7/8"

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1-7/8"

4-1/2"

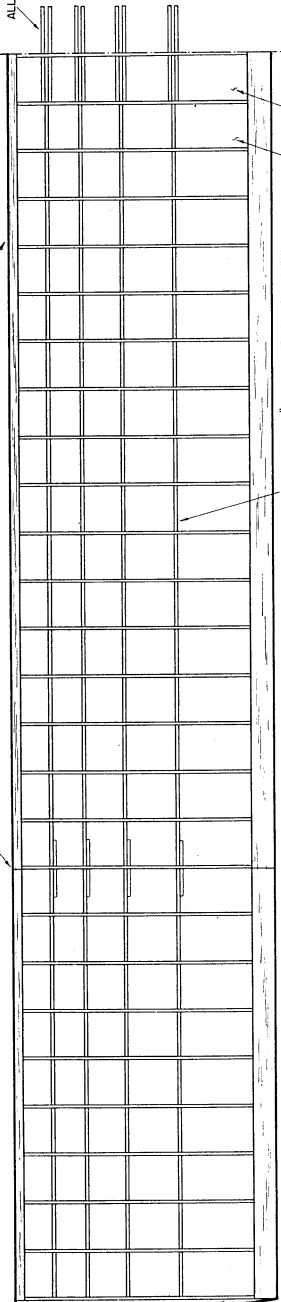
1-7/8"

4-1/2"

5/16" BLOCK TIPS - BEVELLED

POLYHEDRAL BREAK- MAKE ONE RIGHT, ONE LEFT

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4-1/2"

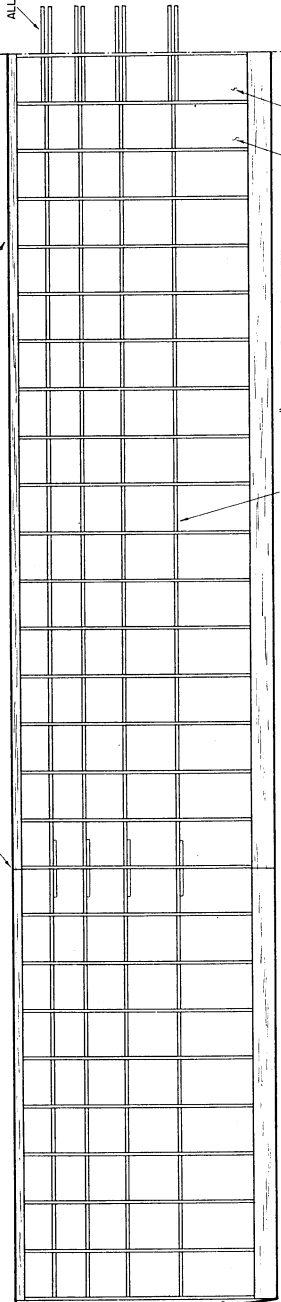
1-7/8"

4-1/2"

5/16" BLOCK TIPS - BEVELLED

POLYHEDRAL BREAK- MAKE ONE RIGHT, ONE LEFT

3/16" X 1/4" LEADING EDGE



DOUBLE COVER FIRST TWO CENTER PANELS

1/16" SHEET - MAKE TWO

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1-7/8"

4-1/2"

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1-7/8"

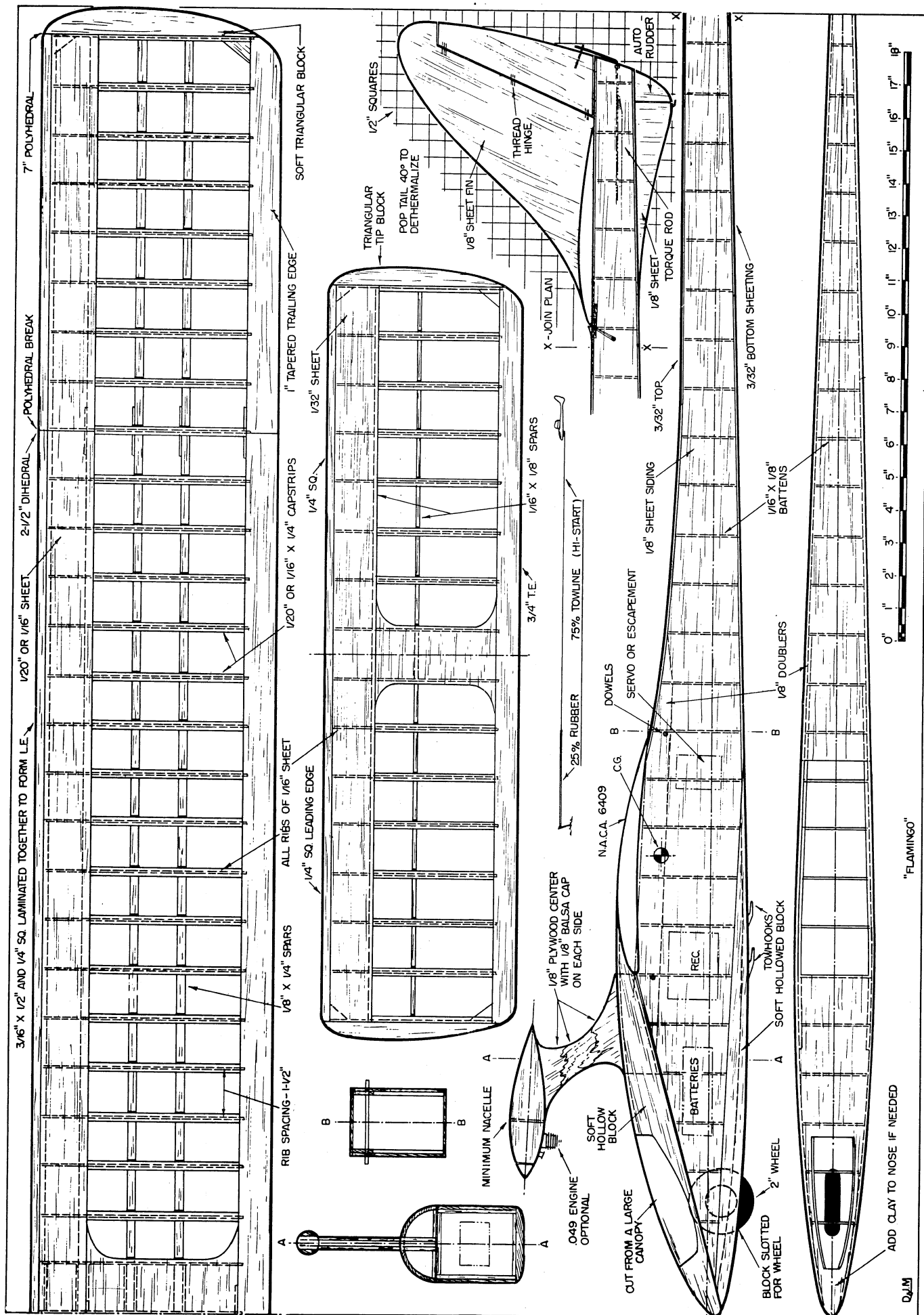
4-1/2"

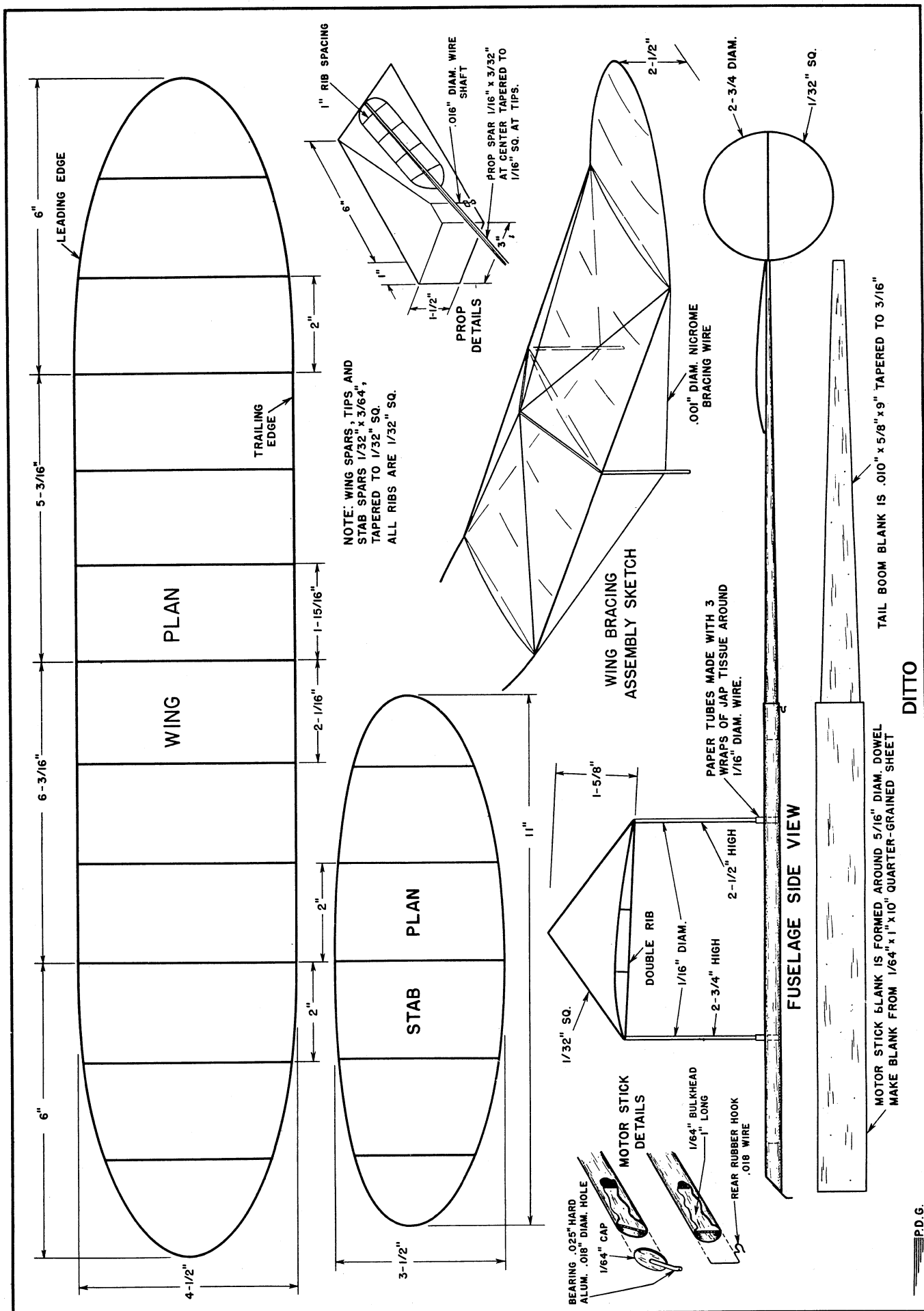
1-7/8"

4-1/2"

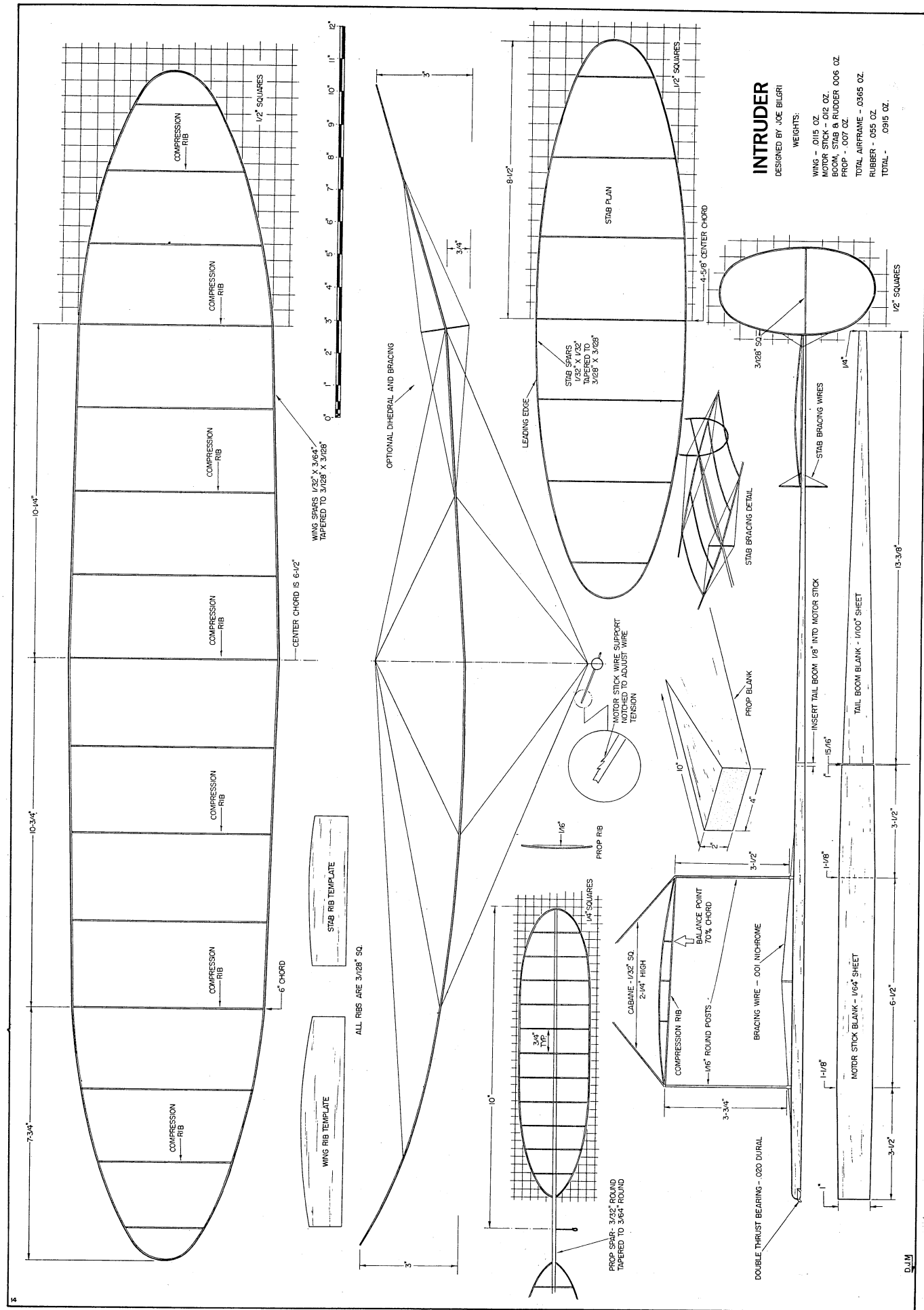
1-7/8"

4-1/2"



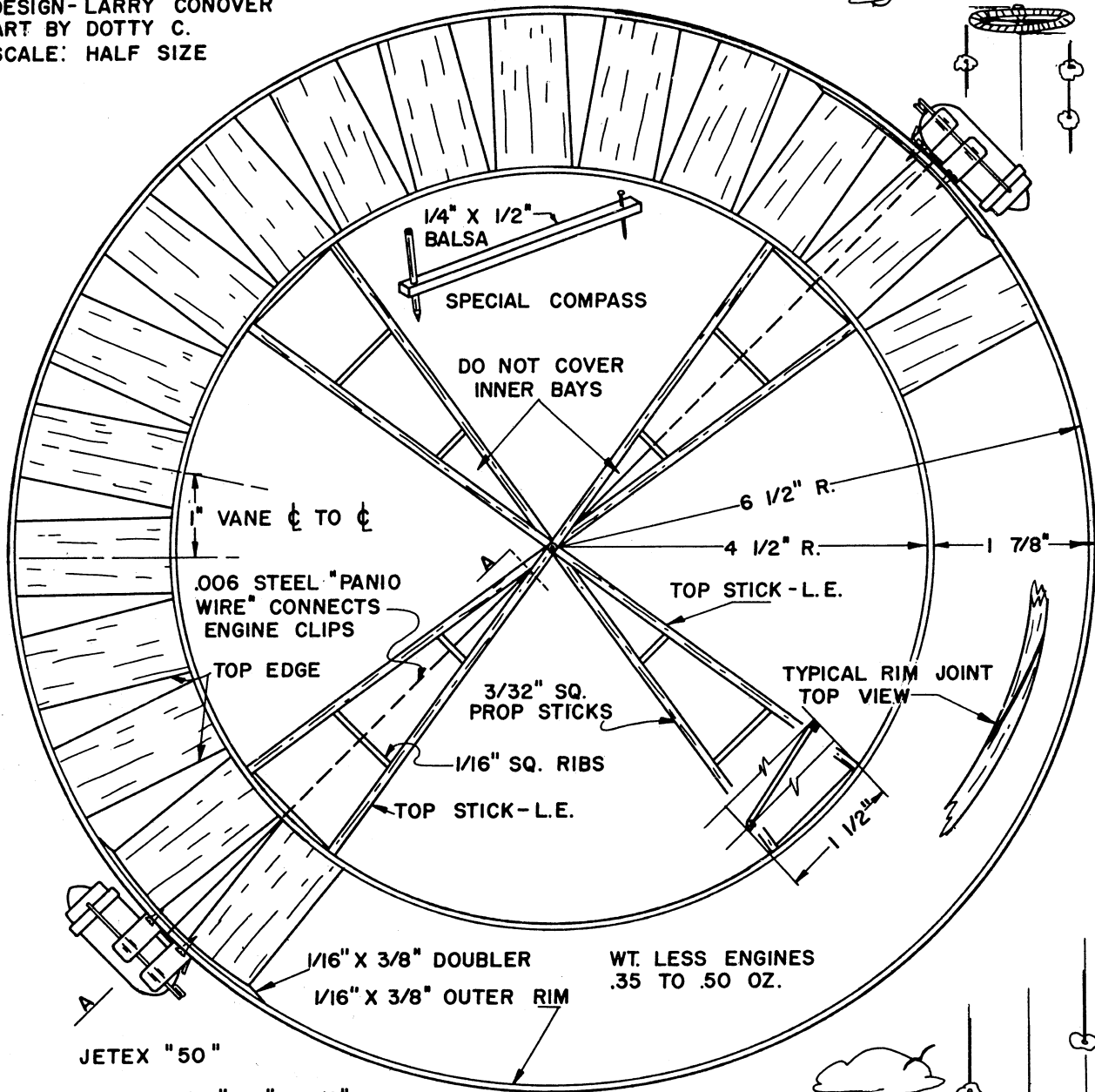






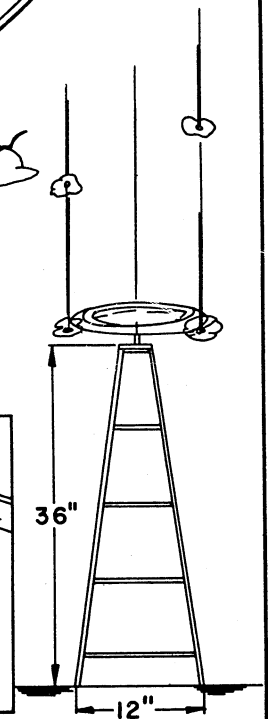
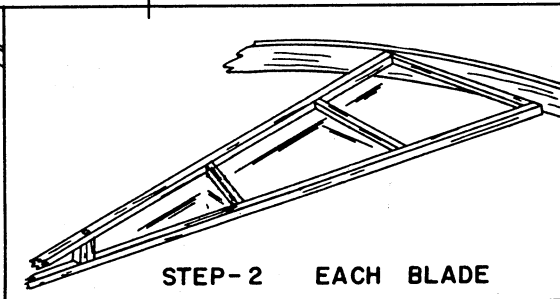
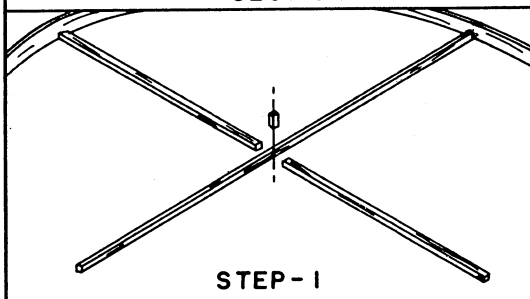
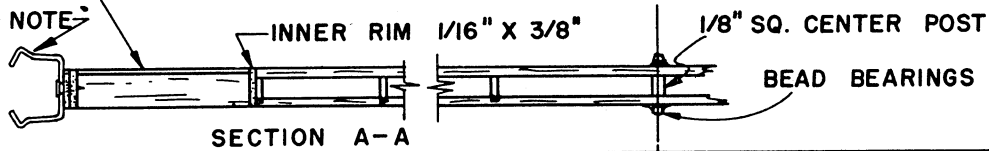
# FLYING SAUCER

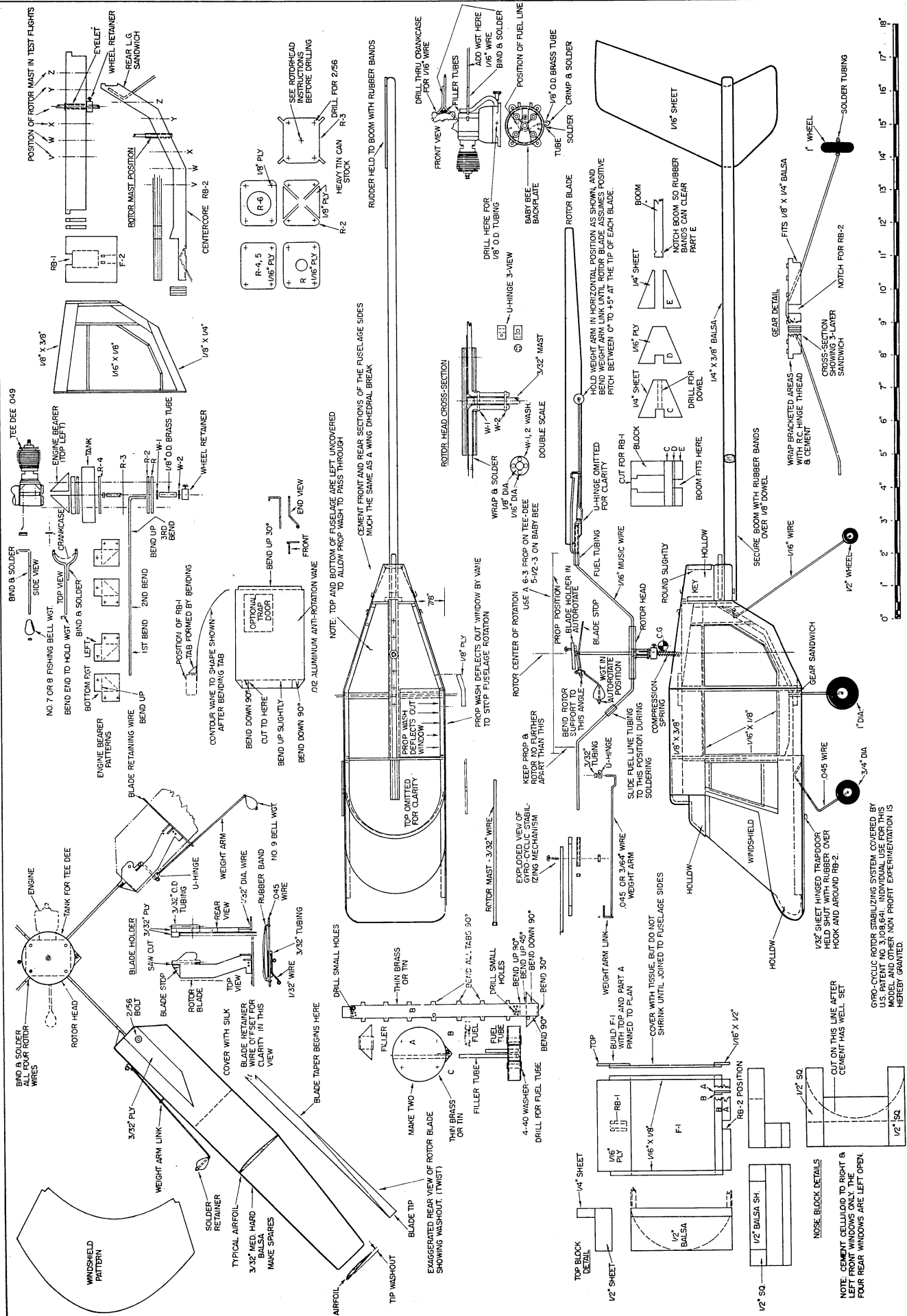
DESIGN - LARRY CONOVER  
ART BY DOTTY C.  
SCALE: HALF SIZE



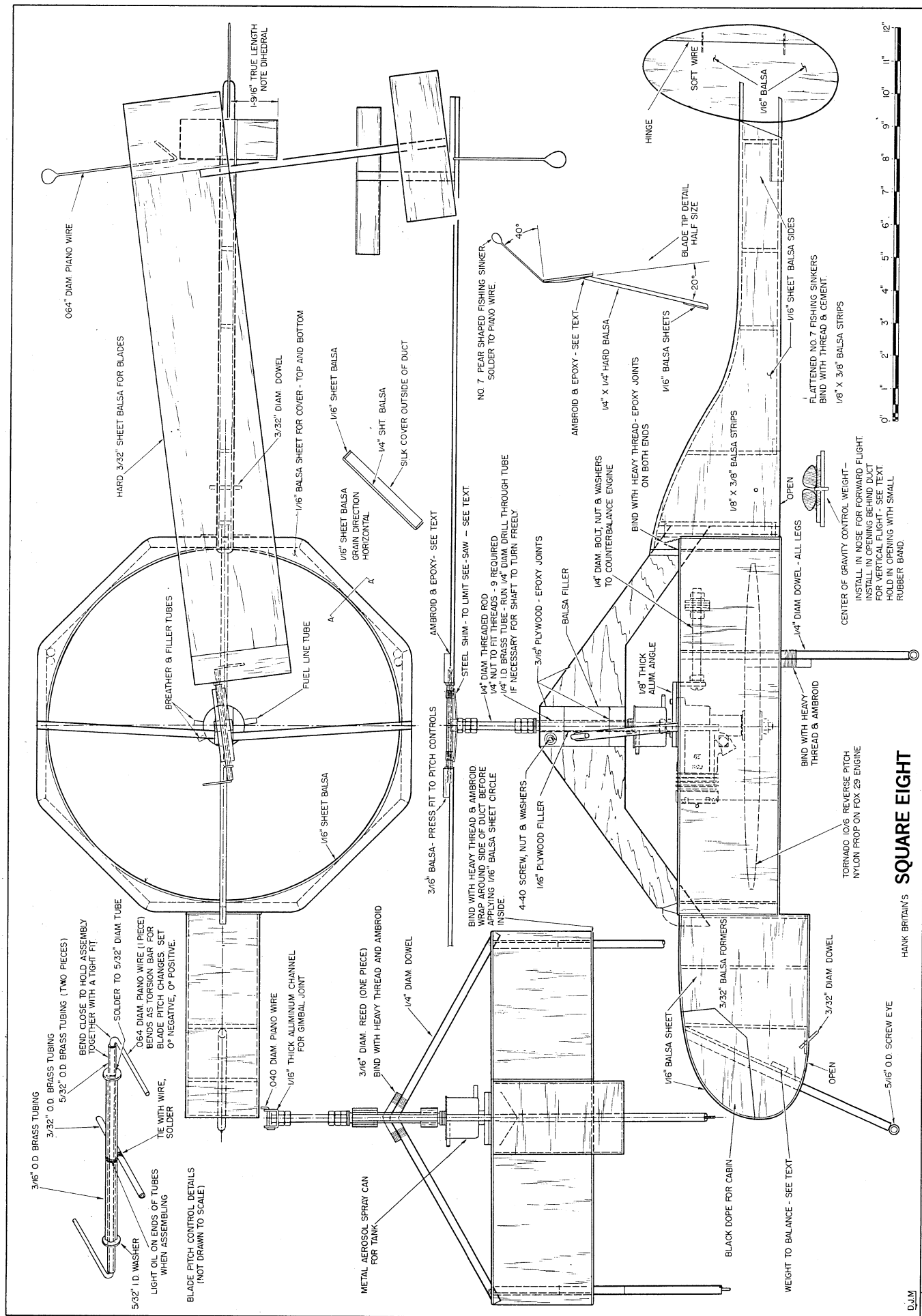
LIFT VANES 1/32" X 1" X 7/8"  
32 REQ. - LIGHT "C" STOCK

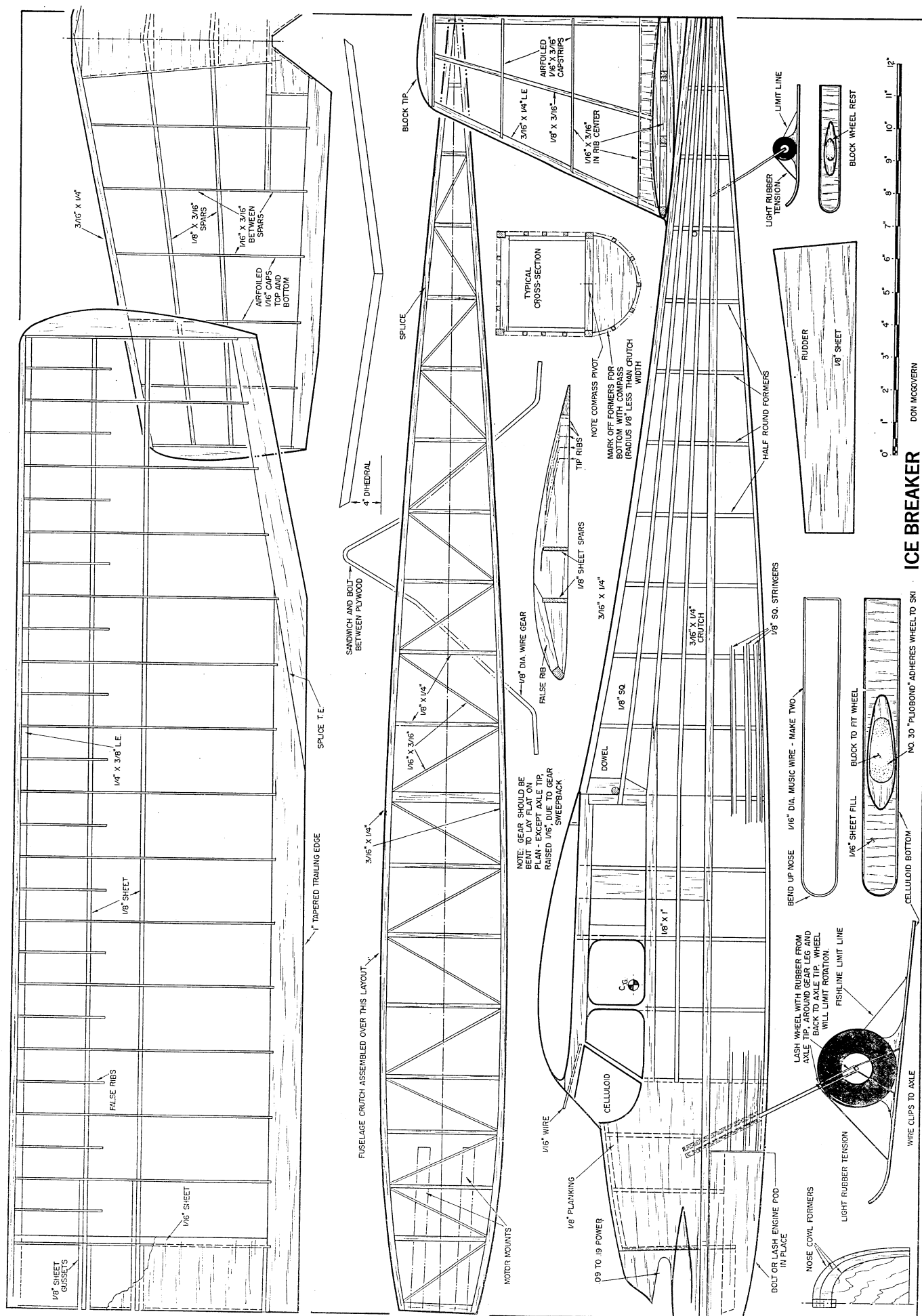
NOTE





## WHIRL-BIRD







## PUBLICATIONS



**MODEL CRAFTSMAN PUBLISHING CORP.**